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**National Highway
Traffic Safety
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Final Report

Cost Evaluation of Federal Motor Vehicle Safety Standard
210 - Passenger Cars and Evaluation of Cost and Weight
Trends for Standards 201, 203 and 204 - Passenger Cars
Volume: II

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| <p>16. Abstract</p> <p>The consumer cost and weight effect on 1983 vehicles, to comply with FMVSS 201, 203 and 204 as determined by a process of teardown analysis of those components affected by the Standards.</p> <p>The Standards cover:</p> <ul style="list-style-type: none"> FMVSS 201 - Occupant Protection in Interior Impact, VOLUME I FMVSS 203 - Impact Protection for the Driver from the Steering Control System, VOLUME II* FMVSS 204 - Steering Control Rearward Displacement, VOLUME III <p>A pre, post and trend cost and weight effect of complying with FMVSS 210 as determined by detail analysis of those components affected.</p> <p>The cars selected for this study were to be high volume representatives of all the various size classifications and, as near as possible, carry-over models or direct descendants of those in previous related studies. The sampling also includes cars downsized by weight reductions, recently redesigned smaller, more efficient vehicles with four and six cylinder engines, rack and pinion steering and front wheel drive.</p> <p>* This Document is VOLUME II (see above).</p> | | | |
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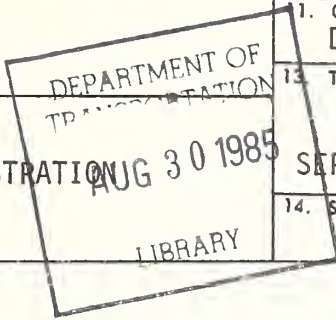


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PREFACE

Pioneer Engineering has conducted a cost study of components affected by:

- FMVSS 201 - Occupant Protection in Interior Impact
- FMVSS 203 - Impact protection for the Driver from the Steering Control System
- FMVSS 204 - Steering Control Rearward Displacement
- FMVSS 210 - Seat Belt Assembly Achorages

This work was performed under Contract DTNH22-83-C-06007. The objective of the study was to develop cost trends of the components required to meet these Standards. These costs were developed by selecting a sampling of automobiles that are produced in a relative high volume and were representative of a majority of those sold in the United States. Components from the sample vehicles were obtained and detailed cost were derived through reverse engineering analysis and detailed processing. The resulting cost data indicates the magnitude of the economic impact on the industry and the consumer from the implementation of these Standards. All cost data were based on on third quarter 1984 economics.

This contractor, Pioneer Engineering and Manufacturing Company, has conducted numerous previous "teardown" analyses for the NHTSA and private industry. The methodology for both conducting the "teardown" analysis and determining the estimated costs from actual part manufacturing process analysis has been developed and perfected by over 15 years experience in this type of work. The cost estimating techniques employed in the analysis are based on current automotive industry practice to assure real world consumer price values.

The contractor acknowledges the contributions of its staff, the automotive manufacturers, the Motor Vehicle Manufacturers Association and automotive trade publications. Special acknowledgement is made to the Contract Technical Manager, Mr. Warren LaHeist, for his contributions and helpful reviews throughout the program.

INTRODUCTION

The objectives of this contract were as follows:

- Determine the cost effect (trend cost) that Federal Motor Vehicle Safety Standards:
 - FMVSS 201 - Occupant Protection in Interior Impact
 - FMVSS 203 - Impact Protection for the Driver from the Steering Control System
 - FMVSS 204 - Steering Control Rearward Displacementhad on 1983 automobiles and also to make a determination of the affect of downsizing, weight reduction and front wheel drive may have had on the cost of implementing these Standards. These Standards were implemented in 1968.
- Develop Pre, Post and Trend Cost Comparison of:
 - oo FMVSS 210 - Seat Belt Assembly Anchoragesfor full, mid, compact, sub-compact, foreign cars, multi-purpose vehicles, and both standard and light-weight pickup trucks.

The basis for the above price determinations is the "teardown" and analysis of system components from selected vehicles representing comparable makes/models prior to and after the effective date of the Standards. All of the cost information is therefore compiled from actual changes made by the manufacturers to assure compliance with the requirements specified in the FMVSS.

The analysis of design changes between comparable vehicles highlights those resulting from implementation of the Standards and those made for other reasons, such as styling, cost reduction or other functional improvements not associated with the requirement of these Standards. The analysis also provides the material type and weight of all components in the systems. For those components identified as changed because of the Standards, a detailed, or Micro-Cost Analysis, was conducted to determine the variable manufacturing costs. This analysis is based on a complete manufacturing process study which provides material, labor and burden costs for each part plus the costs of assembly operations.

A Macro-Analysis of the major U.S. automobile manufacturer's financial statements was utilized to determine the ratio of cost of goods sold to income from sales which

in turn provided an average ratio of variable manufacturing cost to manufacturers wholesale price. An analysis of dealer discounts in the automotive industry provided a typical ratio of wholesale price to consumer price. A summation of the component consumer price changes for each set of comparable vehicles provided the net consumer price effect of the specified Standards.

The quantity of pages generated by this effort has dictated that this report be presented in three (3) volumes. This volumes includes text for the entire report, and the data for Standard 201. Volume II contains the data for Standards 203 and 204; Volume III contains text for Standard 210.

SUMMARY

The purpose of FMVSS 203 is to minimize chest injuries by limiting to 2,500 pounds, the force that can be exerted on a driver's chest as it strikes the steering wheel at a relative velocity of 15 MPH in the course of a frontal collision. The purpose of FMVSS 204 is to minimize chest injuries by limiting the amount of rearward movement of the steering wheel to 5.0 inches in the course of a 30 MPH frontal barrier collision.

Each manufacturer has his own idea of the most effective way to build a steering system that meets both Standards. Generally a break-away column mounting bracket and collapsing or telescoping steering shaft and column are used to satisfy Standard 203 and an intermediate steering shaft with a universal joint at each end is used to prevent rearward displacement of the steering shaft (Standard 204). However, most designs have components that serve either or both Standards depending on the type of accident. This makes it difficult to assign a group of parts, or a particular part, or even an operation on a part, as a penalty to a particular Safety Standard.

The study included four vehicles with worm and recirculating ball type steering systems (Chevrolet Caprice and Malibu, Ford Crown Victoria and Chrysler Fifth Ave.). The remaining eight cars had rack and pinion steering. Four had floor shifts as standard equipment (Ford Mustang, AMC Alliance, Toyota Tercel and Nissan Sentra) and required no shifting tube, the average shifting tube cost was \$2.50. No specific cost trend was evident from the study. Choice of design appeared to have more effect on the cost than the type of steering system used or the size of the vehicle. Of the "big three" domestic manufacturers, Chevrolet had the least costly system on their standard and intermediate cars and the most costly systems of the three compacts.

MAKE AND MODEL IDENTIFICATION OF VEHICLES
 USED IN COST SAMPLING PLAN FOR
 FEDERAL MOTOR VEHICLE SAFETY STANDARD 203 & 204

| NUMBER | MAKE | SIZE* | MODEL |
|--------|-----------|--------------|-----------------------------|
| 01 | Chevrolet | Standard | Impala-Caprice |
| 02 | Chevrolet | Intermediate | Malibu |
| 03 | Chevrolet | Compact | Cavalier |
| 04 | Ford | Standard | Crown Victoria |
| 05 | Ford | Intermediate | Fairlane-LTD |
| 06 | Ford | Compact | Mustang |
| 07 | Chrysler | Standard | 5th Avenue |
| 08 | Chrysler | Intermediate | "E" Class |
| 09 | Chrysler | Compact | Valiant-Reliant |
| 10 | A.M.C. | Subcompact | American, Gremlin, Alliance |
| 11 | Toyota | Subcompact | Corona, Tercel |
| 12 | Nissan | Subcompact | Sentra |

*Size Classification Per Automotive News

STEERING SYSTEMS

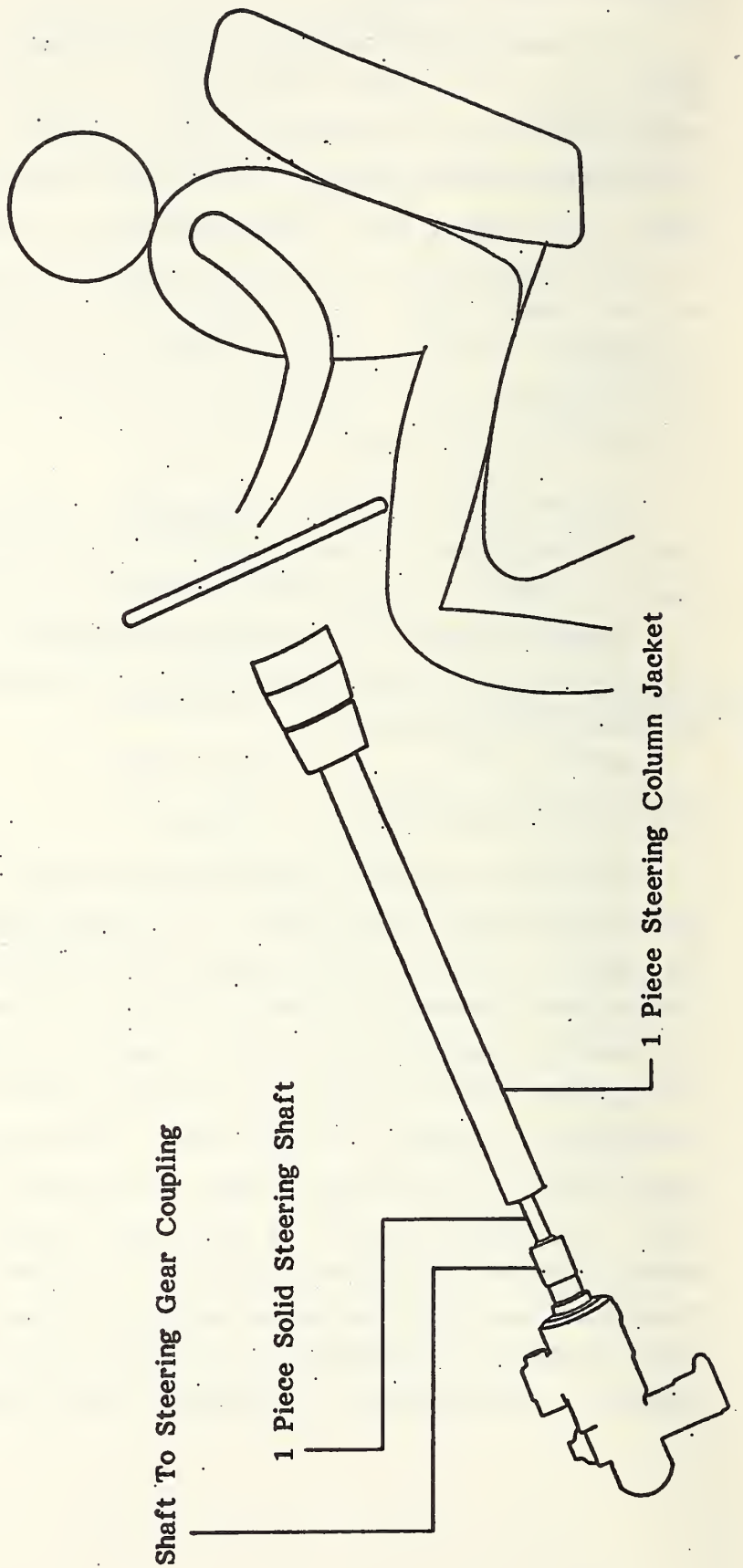
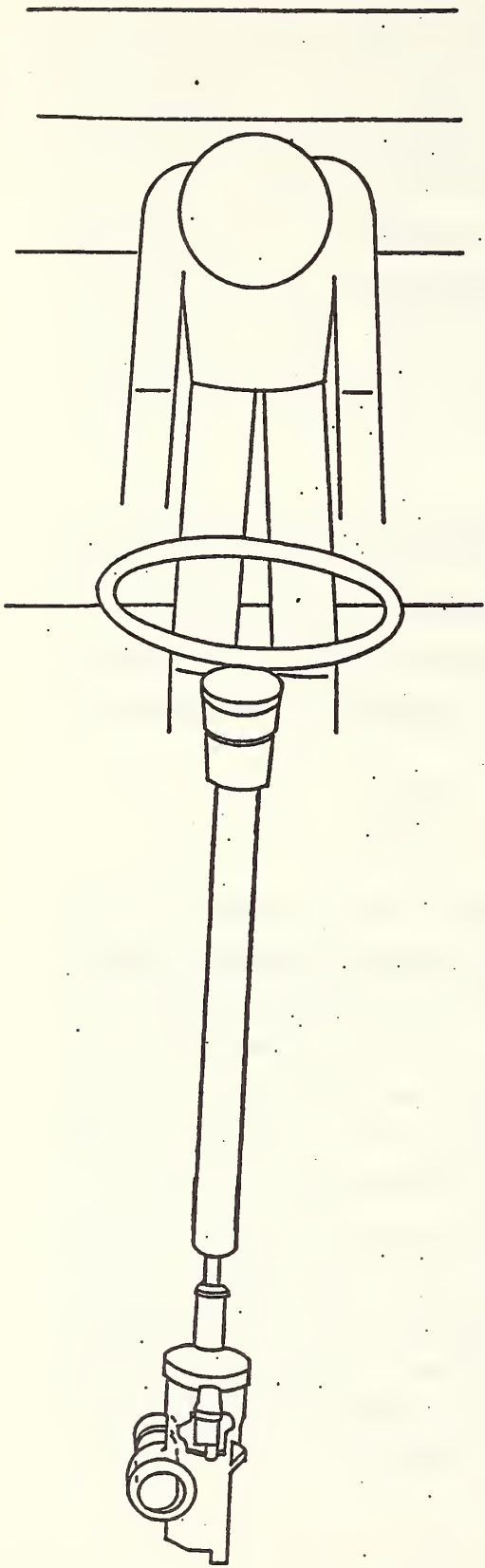
PRE-STANDARD DESIGN

The steering shaft end column depicted in Figure A is a typical, Pre- 203 Standard system used by most auto manufacturers in cars built prior to 1967. The steering column jacket was a one piece tube mounted solidly to the dash and instrument panels. The shifting tube and steering shaft rotated independently, on bearings, within the jacket. The steering shaft was a straight one piece, solid steel bar that extended from the steering wheel to a "rag" or "pot" type coupling between the steering shaft and the steering gear. One purpose of the coupling was to compensate for any misalignment between the body mounted steering column and the chassis or frame mounted steering gear. Another was to isolate the driver from some of the engine and road noise and vibration.

This was a very efficient, trouble free steering system, but it presented a huge threat to the driver. A sudden loss of forward motion of the car threw the driver, chest first, onto the steering wheel. If the steering wheel gave way, the driver's luck went from bad to worse; the steering shaft remained as a blunt, solidly mounted spear. Unrestrained drivers often suffered severe or even fatal chest injuries from relatively low speed frontal collisions.

POST-STANDARD DESIGN

The first generation of changes the auto manufacturers made to comply with the standard are represented in Figure B and were typical throughout the auto industry. The steering column mounting brackets were secured to the instrument panel with friction slides between the brackets and the fasteners. At a given downward force, the mounting brackets slid out from under the retainers and allowed the steering column jacket, which had been systematically weakened by a series of diamond shaped perforations, to collapse at a given rate. As the column jacket began to collapse, a larger portion of the downward force was diverted to the shifting tube and steering shaft. The shifting tube was a three piece assembly; the two end sections had an outside diameter just slightly larger than the inside diameter of the center section. The end sections were attached to the center section with an interference (press) fit which enables them to telescope into the center section at a controlled rate. Torsional strength is maintained by a longitudinal key and slot system.



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Figure A
Typical Pre-Standard Steering System

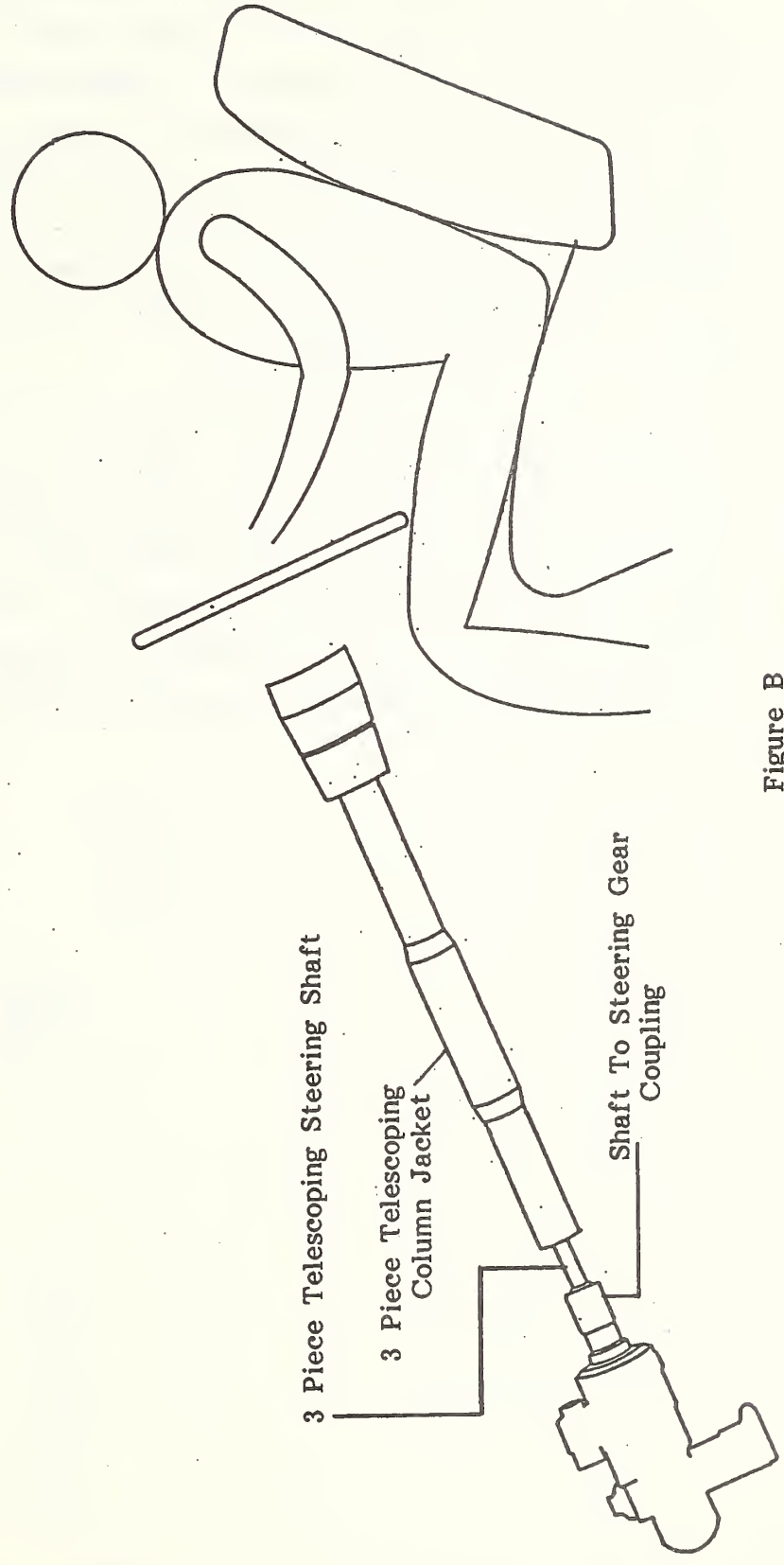
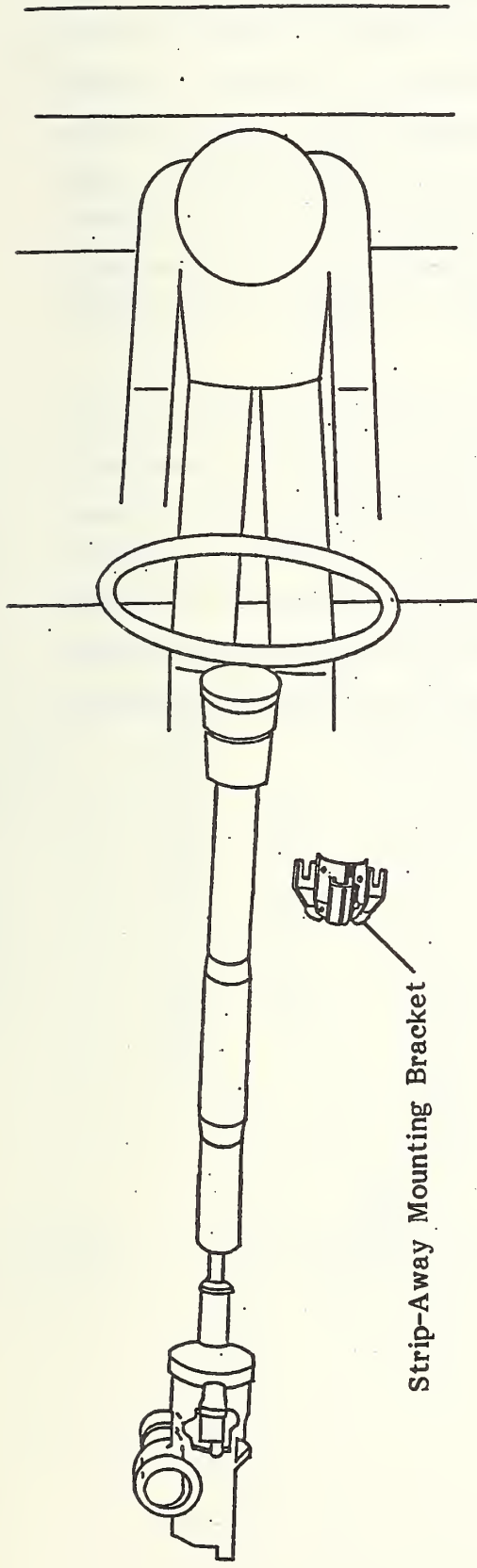


Figure B
 Typical Post-Standard Steering System (Early Trend)

CURRENT DESIGN

All of the cars studied have made extensive changes since the original Post-Standard vehicles. Every car in the sample used an intermediate steering shaft and two universal joints. The advantages of an additional universal joint and shaft assembly are: manifold, misalignment correction, more efficient torsional effort transfer, steering gear location much less critical, more efficient noise and vibration isolation, more positive deterrent to steering shaft intrusion into the passenger compartment (Standard 204), and the intermediate shaft and two universal joints are necessary components of a rack and pinion steering system because of the relative position of the steering column and the pinion shaft (Figure C).

All of the manufacturers have developed their own method of providing a closely controlled energy absorbing column. Most of the methods used involve shearing a plastic pin or ring as downward loads approach 2,500 pounds (Standard 203's maximum limit), and then some form of metal deformation as the load continues to telescope the column downward (Figure D). Apparently, automobile manufacturers found that shearing forces are much more dependable than frictional forces and are not as severely affected by oily or rusty surface conditions, and required less stringent tolerances.

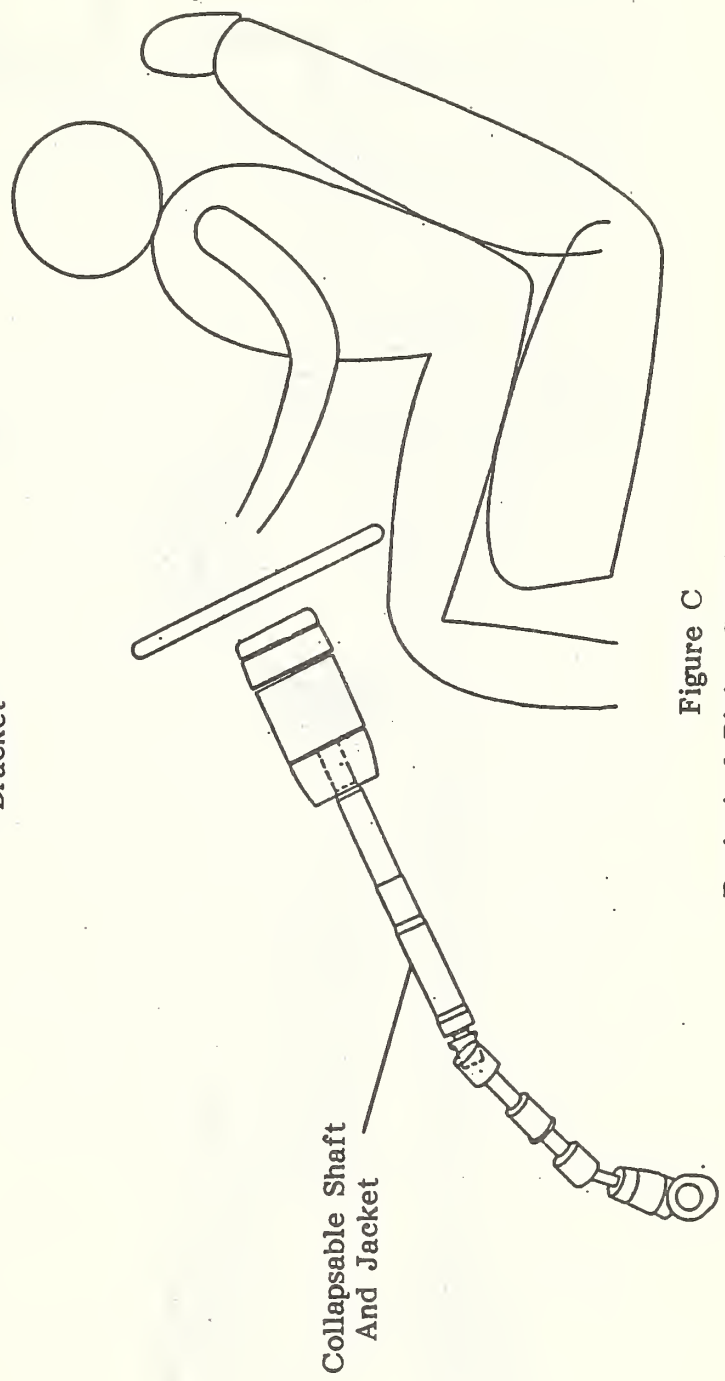
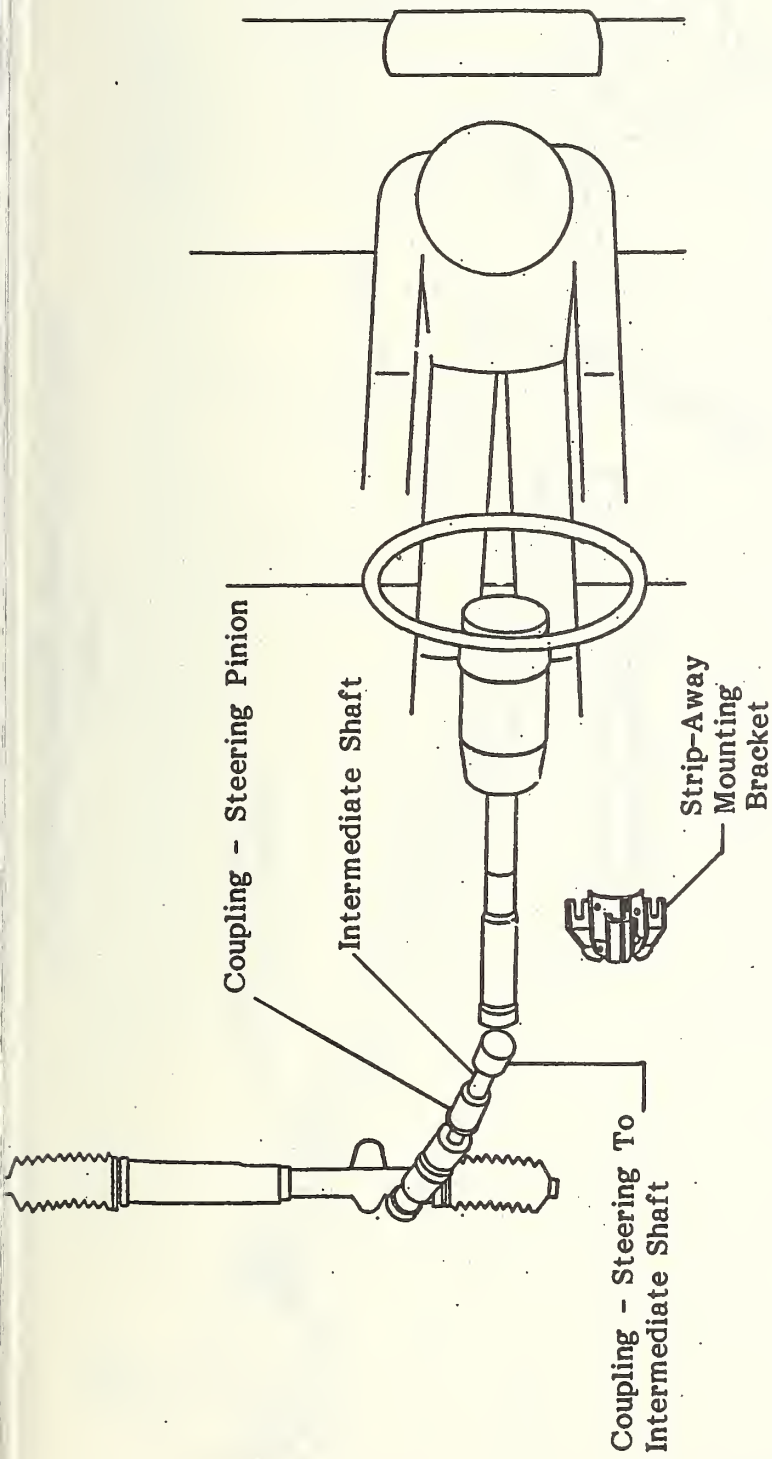


Figure C
 Rack And Pinion Steering System

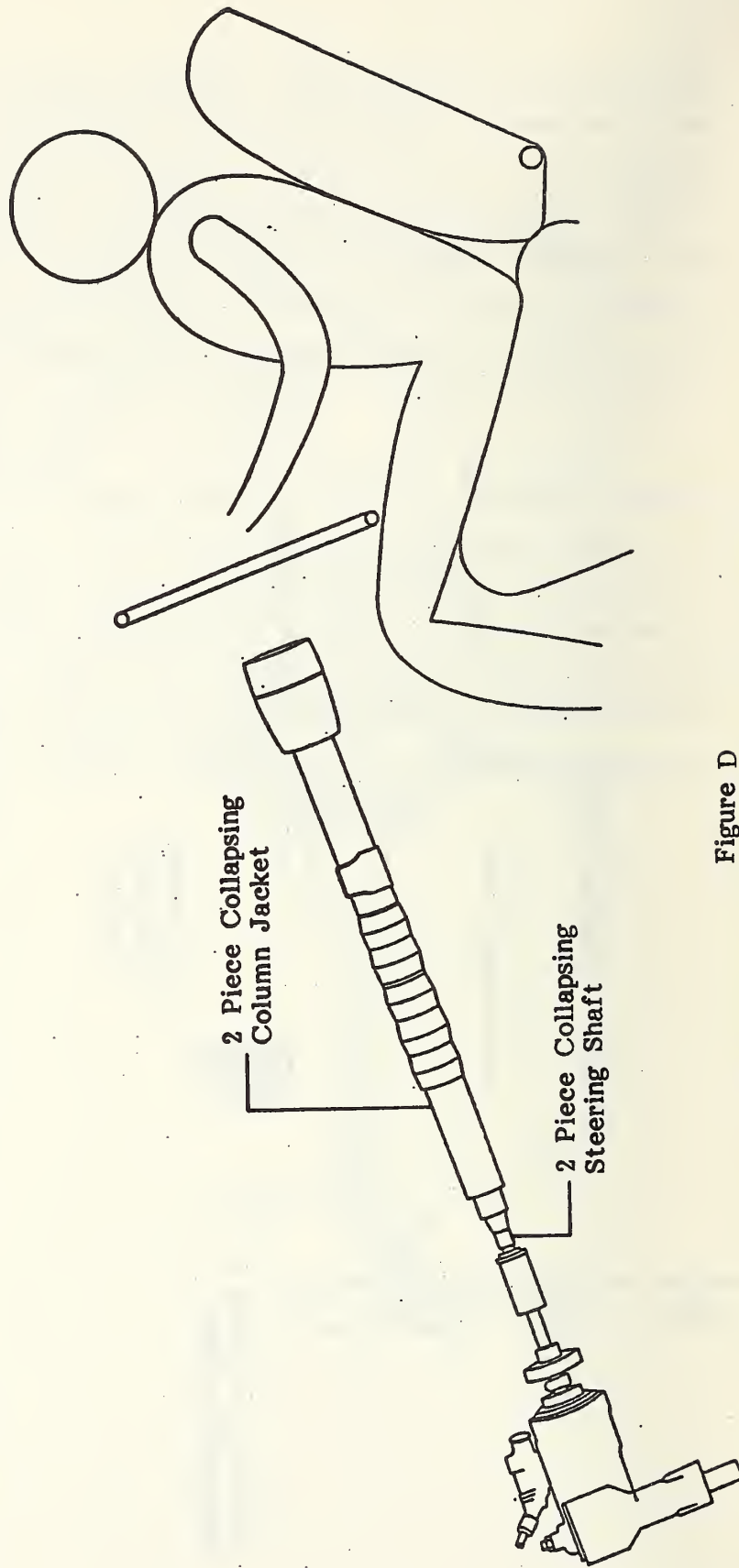
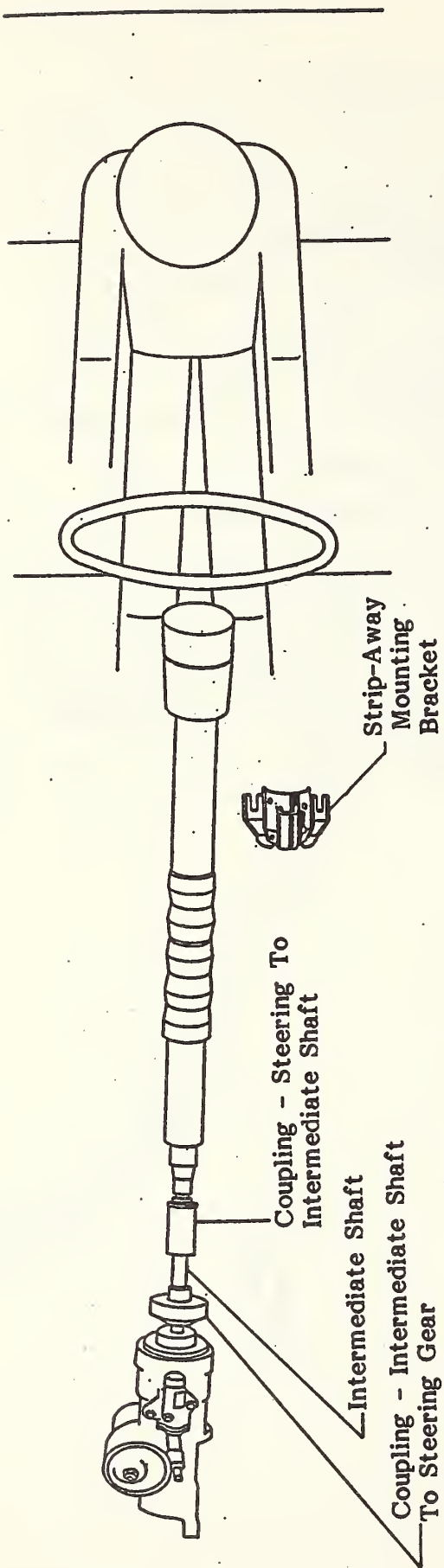


Figure D
Post-Standard Steering System (Late Trend)

SHIFT TUBE ASSEMBLY

Four of the cars studied use a standard floor shift (Mustang, Alliance, Tercel and Sentra) and no column shift tube is required.

The three Chevrolet and three Chrysler models have shifting tubes of similar construction and cost, approximately \$2.00 each.

Ford's LTD and Crown Victoria use a solid steel bar for a \$1.50 penalty, in place of the lower shift tube used by Chevrolet and Chrysler. Ford's Crown Victoria's design calls for an additional lower shifting tube bearing for an additional \$.75 penalty.

TABLE 1

SHIFT TUBE ASSEMBLY

| VEHICLE MAKE/MODEL PART # | NO. | COST | WT. LB. | \$/LB. | SHIFT TUBE UPPER (02) | | SHIFT TUBE LOWER (05) | | SHAFT (14) | | BUSHING OR BEARING (16) | | MOUNTING BRACKET (04) | | OTHER * COST |
|---------------------------|-----|------|---------|--------|-----------------------|------|-----------------------|------|------------|------|-------------------------|------|-----------------------|------|--------------|
| | | | | | MATL | COST | MATL | COST | MATL | COST | MATL | COST | MATL | COST | |
| Chevrolet Caprice | 1 | 2.16 | 1.85 | 1.17 | CRS | 0.92 | CRS | 0.82 | | | | | | | 0.42 |
| Chevrolet Malibu | 2 | 2.11 | 1.70 | 1.24 | STTB | 0.75 | STTB | 0.85 | | | | | | | 0.51 |
| Chevrolet Cavalier | 3 | 1.74 | 1.21 | 1.44 | STTB | 0.67 | STTB | 0.58 | | | | | | | 0.49 |
| Ford Crown Victoria | 4 | 4.37 | 3.73 | 1.17 | --- | --- | STTB | 0.63 | CRS | 2.06 | STL | 0.75 | HRS | 0.34 | 0.59 |
| Ford LTD | 5 | 3.50 | 3.49 | 1.00 | --- | --- | HRS | 0.40 | CRS | 2.06 | | | HRS | 0.37 | 0.67 |
| Ford Mustang | 6 | --- | --- | --- | --- | --- | --- | --- | | | | | | | --- |
| Chrysler Fifth Ave. | 7 | 1.94 | 1.09 | 1.78 | STTB | 0.72 | STTB | 0.59 | | | | | | | 0.63 |
| Chrysler "E" Class | 8 | 1.94 | 1.09 | 1.78 | STTB | 0.72 | STTB | 0.59 | | | | | | | 0.63 |
| Plymouth Reliant | 9 | 1.94 | 1.09 | 1.78 | STTB | 0.72 | STTB | 0.59 | | | | | | | 0.63 |
| AMC Renault/Alliance | 10 | --- | --- | --- | --- | --- | --- | --- | | | | | | | --- |
| Toyota Tercel | 11 | --- | --- | --- | --- | --- | --- | --- | | | | | | | --- |
| Nissan Sentra | 12 | --- | --- | --- | --- | --- | --- | --- | | | | | | | --- |

*This chart contains a list of parts whose costs have a significant effect on the cost difference of the safety features between car lines.

Other costs include those remaining components whose cost varies little from car to car.

TABLE 2

SHIFT TUBE ASSEMBLY

| VEHICLE MAKE/MODEL | VEHICLE NO. | A SAFETY SYSTEM COST | B NO. OF VEHICLES PRODUCED | C WEIGHTED COST (A X B) |
|-------------------------|----------------|-------------------------------|-------------------------------------|-------------------------------|
| Chevrolet Caprice | 1 | \$2.16 | 676,907 | \$1,462,119 |
| Chevrolet Malibu | 2 | 2.11 | 978,105 | 2,063,801 |
| Chevrolet Cavalier | 3 | 1.74 | 1,168,189 | 2,032,648 |
| Ford Crown Victoria | 4 | 4.37 | 152,454 | 666,223 |
| Ford LTD | 5 | 3.50 | 420,858 | 1,473,003 |
| Ford Mustang | 6 | --- | 219,159 | --- |
| Chrysler Fifth Ave. | 7 | 1.94 | 123,684 | 239,946 |
| Chrysler "E" Class | 8 | 1.94 | 119,009 | 230,887 |
| Plymouth Reliant | 9 | 1.94 | 338,652 | 656,984 |
| AMC Renault/Alliance | 10 | --- | 142,205 | --- |
| Toyota Tercel | 11 | --- | 147,965 | --- |
| Nissan Sentra | 12 | --- | <u>209,889</u> | <u>---</u> |
| | | | 4,697,076 | \$8,825,611 |

Safety System Weighted Average Cost = \$1.88.

Safety System Weighted Average Cost - Column B Total Divided By Column A Total.

MOUNTING BRACKETS AND COLUMN JACKETS

Steering column mounting brackets for most current vehicles are designed to hold the column in place under any reasonable load other than a downward axial load approaching 2,500 pounds at which point it is stripped away from the instrument panel and allows the steering shaft, column jacket and shifting tube (if there is one) to collapse at a controlled rate.

Ford's lower column mounting bracket is fastened securely to the instrument panel and under a given load (approximately 2,500 pounds) the steering column jacket moves through the mounting bracket which forms (6) grooves in the jacket thus absorbing energy and reducing impact forces on the driver's chest in a frontal collision.

STEERING COLUMN MOUNTING BRACKET ASSEMBLY

| VEHICLE MAKE/MODEL PART # | NO. | COST | WT. LB. | \$/LB. | MTG. BRKT | | LOWER MTG. BRKT. | | ASSY COST | OTHER * COST |
|---------------------------------|-----|------|------------|--------|-----------|------|---------------------|------|--------------|-----------------|
| | | | | | MATL | COST | MATL | COST | | |
| Chevrolet Caprice | 1 | 0.79 | 1.33 | 0.59 | HRS | 0.56 | — | — | 0.09 | 0.14 |
| Chevrolet Malibu | 2 | 0.76 | 1.27 | 0.60 | HRS | 0.56 | — | — | 0.09 | 0.11 |
| Chevrolet Cavalier | 3 | 0.78 | 0.98 | 0.80 | HRS | 0.45 | — | — | 0.09 | 0.24 |
| Ford Crown Victoria | 4 | 2.02 | 1.99 | 1.02 | HRS | 0.21 | PM | 1.15 | 0.43 | 0.23 |
| Ford LTD | 5 | 2.02 | 1.99 | 1.02 | HRS | 0.21 | PM | 1.15 | 0.43 | 0.23 |
| Ford Mustang | 6 | 2.02 | 3.14 | 0.77 | HRS | 0.21 | PM | 1.15 | 0.43 | 0.23 |
| Chrysler Fifth Ave. | 7 | 1.49 | 2.00 | 0.75 | HRS | 0.39 | HRS | 0.97 | 0.07 | 0.06 |
| Chrysler "E" Class | 8 | 1.49 | 2.00 | 0.75 | HRS | 0.39 | HRS | 0.97 | 0.07 | 0.06 |
| Plymouth Reliant | 9 | 1.52 | 2.04 | 0.75 | HRS | 0.39 | HRS | 0.97 | 0.07 | 0.09 |
| AMC Renault/Alliance | 10 | 0.22 | 0.57 | 0.39 | HRS | 0.22 | — | — | — | — |
| Toyota Tercel | 11 | 1.28 | 1.67 | 0.77 | HRS | 1.00 | — | — | 0.13 | 0.15 |
| Nissan Sentra | 12 | 0.43 | 0.61 | 0.70 | G/ST | 0.33 | — | — | 0.07 | 0.03 |

*This chart contains a list of parts whose costs have a significant effect on the cost difference of the safety features between car lines.

Other Costs include those remaining components whose cost varies little from car to car.

TABLE 4**STEERING COLUMN MOUNTING BRACKET ASSEMBLY**

| VEHICLE MAKE/MODEL | VEHICLE NO. | A SAFETY SYSTEM COST | B NO. OF VEHICLES PRODUCED | C WEIGHTED COST (A X B) |
|-------------------------|----------------|-------------------------------|-------------------------------------|-------------------------------|
| Chevrolet Caprice | 1 | \$0.79 | 676,907 | \$ 534,754 |
| Chevrolet Malibu | 2 | 0.76 | 978,105 | 743,360 |
| Chevrolet Cavalier | 3 | 0.78 | 1,168,189 | 911,187 |
| Ford Crown Victoria | 4 | 2.02 | 152,454 | 307,975 |
| Ford LTD | 5 | 2.02 | 420,858 | 850,133 |
| Ford Mustang | 6 | 2.02 | 219,159 | 442,701 |
| Chrysler Fifth Ave. | 7 | 1.49 | 123,684 | 184,289 |
| Chrysler "E" Class | 8 | 1.49 | 119,009 | 177,323 |
| Plymouth Reliant | 9 | 1.52 | 338,652 | 514,751 |
| AMC Renault/Alliance | 10 | 0.22 | 142,205 | 31,285 |
| Toyota Tercel | 11 | 1.28 | 147,965 | 189,395 |
| Nissan Sentra | 12 | 0.43 | <u>209,889</u> | <u>90,252</u> |
| | | | 4,697,076 | \$4,887,138 |

Safety System Weighted Average Cost = \$1.04.

Safety System Weighted Average Cost - Column B Total Divided By Column A Total.

TABLE 5

STEERING COLUMN JACKET ASSEMBLY

| VEHICLE MAKE/MODEL PART # | NO. | COST | WT. LB. | \$/LB. | JACKET UPPER MATL COST (22) | JACKET LOWER MATL COST (35) | SPRING MATL COST (28) | JACKET SLEEVE MATL COST (33) | BEARING MATL COST (32) | OTHER* COST |
|---------------------------|-----|------|---------|--------|-----------------------------|-----------------------------|-----------------------|------------------------------|------------------------|-------------|
| Chevrolet Caprice | 1 | 3.12 | 4.37 | 0.87 | HRS 0.97 | HRS 0.88 | STWR 0.08 | PLYP 0.33 | — | 0.86 |
| Chevrolet Malibu | 2 | 3.06 | 4.20 | 0.89 | HRS 0.97 | HRS 0.82 | STWR 0.08 | PLYP 0.33 | — | 0.86 |
| Chevrolet Cavalier | 3 | 3.26 | 2.56 | 1.54 | HRS 0.77 | HRS 0.58 | STWR 0.08 | PLYP 0.27 | STL 0.75 | 0.81 |
| Ford Crown Victoria | 4 | 3.41 | 1.88 | 1.81 | HRS 1.97 | — | — | — | STL 0.75 | 0.69 |
| Ford LTD | 5 | 3.31 | 1.73 | 1.91 | HRS 1.86 | — | — | — | STL 0.75 | 0.70 |
| Ford Mustang | 6 | 2.90 | 1.73 | 1.68 | HRS 1.86 | — | — | — | STL 0.75 | 0.29 |
| Chrysler Fifth Ave. | 7 | 1.93 | 1.79 | 1.08 | CRS 0.82 | — | — | HRS 0.45 | — | 0.66 |
| Chrysler "E" Class | 8 | 1.93 | 1.79 | 1.08 | CRS 0.82 | — | — | HRS 0.45 | — | 0.66 |
| Plymouth Reliant | 9 | 1.93 | 1.79 | 1.08 | CRS 0.82 | — | — | HRS 0.45 | — | 0.66 |
| AMC Renalut/Alliance | 10 | 1.13 | 0.85 | 1.33 | STTB 0.97 | — | — | — | — | 0.16 |
| Toyota Tercel | 11 | 1.68 | 0.86 | 1.95 | STTB 0.70 | — | — | — | — | 0.98 |
| Nissan Sentra | 12 | 1.64 | 1.03 | 1.59 | STTB 0.81 | — | — | — | — | 0.83 |

*This chart contains a list of parts whose costs have a significant effect on the cost difference of the safety features between car lines.

Other costs include those remaining components whose cost varies little from car to car.

TABLE 6**STEERING COLUMN JACKET ASSEMBLY**

| VEHICLE MAKE/MODEL | VEHICLE NO. | A SAFETY SYSTEM COST | B NO. OF VEHICLES PRODUCED | C WEIGHTED COST (A X B) |
|-------------------------|----------------|-------------------------------|-------------------------------------|-------------------------------|
| Chevrolet Caprice | 1 | \$3.12 | 676,907 | \$ 2,111,950 |
| Chevrolet Malibu | 2 | 3.06 | 978,105 | 2,993.001 |
| Chevrolet Cavalier | 3 | 3.26 | 1,168,189 | 3,808,296 |
| Ford Crown Victoria | 4 | 3.41 | 152,454 | 519,868 |
| Ford LTD | 5 | 3.31 | 420,858 | 1,393,040 |
| Ford Mustang | 6 | 2.90 | 219,159 | 635,561 |
| Chrysler Fifth Ave. | 7 | 1.93 | 123,684 | 238,710 |
| Chrysler "E" Class | 8 | 1.93 | 119,009 | 229,687 |
| Plymouth Reliant | 9 | 1.93 | 338,652 | 653,598 |
| AMC Renault/Alliance | 10 | 1.13 | 142,205 | 160,692 |
| Toyota Tercel | 11 | 1.68 | 147,965 | 248,581 |
| Nissan Sentra | 12 | 1.64 | <u>209,889</u> | <u>334,217</u> |
| | | | 4,697,076 | \$13,337,203 |

Safety System Weighted Average Cost = \$2.84.

Safety System Weighted Average Cost - Column B Total Divided By Column A Total.

STEERING (UPPER) AND INTERMEDIATE SHAFTS

In previous studies and in manufacturer's part manuals, the steering shaft and intermediate or lower shaft have a separate bill of material, and are purchased as separate assemblies. This kind of part grouping is good for comparing different years of the same make and model, however, when comparing costs across carlines, it may be easier to consider the steering shaft and intermediate shaft as one cost unit.

The systems in this sampling all have a steering (upper) shaft, an intermediate (lower) shaft and two universal joints. The three Chrysler cars, Toyota and Nissan include their upper universal with the (upper) steering shaft because the upper yoke of the universal is welded to or forged integral with the steering shaft. The other seven cars include both couplings with the intermediate shaft. There are five different types of universal joints. The most expensive is the forged cross joint (\$3.00 to \$4.00) used for both joints on the Cavalier, Fifth Ave., Sentra and Tercel, and for the upper joint on the Alliance. A "pot" type joint (\$1.62) is used for the Chevrolet Caprice and Malibu.

Chrysler's "E" Class and Reliant use a block and cross pin type for both intermediate shaft joints, they are similar in design to the forged cross joint but slightly less costly.

Ford uses a block and cross pin type for the upper joint on the LTD and Mustang. A "rag" type (actually fabric reinforced neoprene or plastic) (\$1.75) coupling is used for the lower joint on the three Ford models and Caprice and Malibu.

The Alliance is by far the least expensive in this area (\$1.25 under the Mustang and \$5.30 less than the Cavalier). Alliance's cost advantage is due to some very effective cost reductions. It's the only car with a one piece steering shaft, and instead of upper and lower shaft to jacket bearings, Alliance uses a pair of metal sleeves bonded inside rubber bushings to maintain concentricity and reduce friction. Their one piece non-collapsible column jacket is the least expensive and \$1.47 under the average sample column. Alliance is one of four cars in the study with standard floor shifts (Mustang, Tercel and Sentra are the other three), which eliminates the need for a shifting tube assembly.

TABLE 7

STEERING SHAFT ASSEMBLY

| VEHICLE MAKE/MODEL PART # | NO. | COST | WT. LB. | \$/LB. | UPPER MATL COST (02) | LOWER MATL COST (04) | UPPER SHAFT BEARING MATL COST (10) | UNIV. JOINT MATL COST (12 & 13) | LOWER SHAFT BEARING MATL COST (17) | LOWER SHAFT SPRING MATL COST | OTHER* COST |
|---------------------------|-----|------|---------|--------|----------------------|----------------------|------------------------------------|---------------------------------|------------------------------------|------------------------------|-------------|
| Chevrolet Caprice | 1 | 3.20 | 3.77 | 0.85 | CRS 1.38 | HRS 0.83 | STL 0.60 | | | | 0.39 |
| Chevrolet Malibu | 2 | 3.40 | 3.82 | 0.89 | CRS 1.50 | HRS 0.84 | STL 0.60 | | | | 0.46 |
| Chevrolet Cavalier | 3 | 2.97 | 2.81 | 1.06 | CRS 1.42 | STTB 0.53 | STL 0.60 | | | | 0.42 |
| Ford Crown Victoria | 4 | 5.28 | 4.01 | 1.32 | CRS 1.55 | STTB 1.33 | STL 0.55 | | STL 0.85 | | 1.00 |
| Ford LTD | 5 | 4.43 | 3.86 | 1.15 | CRS 1.55 | STTB 1.33 | STL 0.55 | | | | 1.00 |
| Ford Mustang | 6 | 3.59 | 3.55 | 1.01 | CRS 1.47 | HRS 0.68 | STL 0.55 | | | | 0.89 |
| Chrysler Fifth Ave. | 7 | 5.98 | 3.12 | 2.13 | CRS 1.19 | STTB 0.44 | STL 0.55 | VAR 2.43 | STL 0.80 | STL 0.08 | 0.49 |
| Chrysler "E" Class | 8 | 6.29 | 3.19 | 2.18 | CRS 1.15 | HRS 0.43 | STL 0.55 | VAR 2.77 | STL 0.80 | STL 0.08 | 0.51 |
| Plymouth Reliant | 9 | 6.29 | 3.19 | 2.18 | CRS 1.15 | HRS 0.43 | STL 0.55 | VAR 2.77 | STL 0.80 | STL 0.08 | 0.51 |
| AMC Renault/Alliance | 10 | 1.11 | 0.92 | 1.21 | STTB 0.68 | | | | | | 0.43 |
| Toyota Tercel | 11 | 9.13 | 4.26 | 2.14 | CRS 1.27 | STTB 0.60 | STL 0.65 | VAR 4.26 | STL 0.95 | | 1.40 |
| Nissan Sentra | 12 | 6.81 | 3.20 | 2.13 | CRS 1.05 | HRS 0.49 | STL 0.55 | VAR 3.12 | | | 1.60 |

*This chart contains a list of parts whose costs have a significant effect on the cost difference of the safety features between car lines.

Other Costs include those remaining components whose cost varies little from car to car.

TABLE 8

STEERING SHAFT ASSEMBLY

| VEHICLE MAKE/MODEL | VEHICLE NO. | A SAFETY SYSTEM COST | B NO. OF VEHICLES PRODUCED | C WEIGHTED COST (A X B) |
|-------------------------|----------------|-------------------------------|-------------------------------------|-------------------------------|
| Chevrolet Caprice | 1 | \$3.20 | 676,907 | \$ 2,166,102 |
| Chevrolet Malibu | 2 | 3.40 | 978,105 | 3,325,557 |
| Chevrolet Cavalier | 3 | 2.97 | 1,168,189 | 3,469,521 |
| Ford Crown Victoria | 4 | 5.28 | 152,454 | 804,957 |
| Ford LTD | 5 | 4.43 | 420,858 | 1,864,401 |
| Ford Mustang | 6 | 3.59 | 219,159 | 786,781 |
| Chrysler Fifth Ave. | 7 | 5.98 | 123,684 | 739,630 |
| Chrysler "E" Class | 8 | 6.29 | 119,009 | 748,567 |
| Plymouth Reliant | 9 | 6.29 | 338,652 | 2,130,121 |
| AMC Renault/Alliance | 10 | 1.11 | 142,205 | 157,848 |
| Toyota Tercel | 11 | 9.13 | 147,965 | 1,350,920 |
| Nissan Sentra | 12 | 6.81 | <u>209,889</u> | <u>1,429,344</u> |
| | | | 4,697,076 | \$18,973,750 |

Safety System Weighted Average Cost = \$4.04.

Safety System Weighted Average Cost - Column B Total Divided By Column A Total.

TABLE 9

INTERMEDIATE STEERING SHAFT ASSEMBLY

| VEHICLE MAKE/MODEL | NO. | COST | WT. LB. | \$/LB. | UPPER SHAFT MATL COST | INTERM. SHAFT MATL COST | LOWER SHAFT MATL COST | UPPER SHAFT COUPLING MATL COST | LOWER COUPLING MATL COST | ASSY COST | OTHER ** COST |
|----------------------|-----|-------|---------|--------|-----------------------|-------------------------|-----------------------|--------------------------------|--------------------------|-----------|---------------|
| Chevrolet Caprice | 1 | 7.99 | 4.48 | 1.78 | CRS | 1.40 | HRS | VAR | VAR | 2.27 | 0.51 |
| Chevrolet Malibu | 2 | 7.77 | 4.05 | 1.92 | CRS | 1.20 | STTB | VAR | VAR | 2.27 | 0.42 |
| Chevrolet Cavalier | 3 | 11.07 | 2.65 | 4.18 | CRS | 1.03 | STTB | VAR | VAR | 1.60 | 0.22 |
| Ford Crown Victoria | 4 | 8.08 | 4.34 | 1.86 | CRS | 0.80 | STTB | VAR | VAR | 1.52 | 0.26 |
| Ford LTD | 5 | 6.41 | 3.20 | 2.00 | CRS | 0.80 | CRS | VAR | VAR | 1.20 | 0.12 |
| Ford Mustang | 6 | 6.41 | 3.20 | 2.00 | CRS | 0.80 | CRS | VAR | VAR | 1.20 | 0.12 |
| Chrysler Fifth Ave. | 7 | 7.13 | 2.30 | 3.10 | STTB | 0.31 | HRS | VAR | VAR | 1.04 | 0.41 |
| Chrysler "E" Class | 8 | 7.07 | 2.41 | 2.93 | STTB | 0.31 | CRS | HRS | HRS | 1.04 | 0.52 |
| Plymouth Reliant | 9 | 7.06 | 2.41 | 2.93 | STTB | 0.31 | CRS | HRS | HRS | 1.04 | 0.51 |
| AMC Reliant/Alliance | 10 | 7.62 | 2.53 | 3.01 | STTB | 0.48 | CRS | VAR | VAR | 1.52 | 0.01 |
| Toyota Tercel | 11 | 4.91 | 1.36 | 3.61 | --- | --- | STL | VAR | VAR | 0.40 | --- |
| Nissan Sentra | 12 | 5.19 | 1.25 | 4.15 | --- | --- | STL | VAR | VAR | 0.40 | --- |

*Upper Coupling - Lower Yoke Only.

**This chart contains a list of parts whose costs have a significant effect on the cost difference of the safety features between car lines.

Other costs include those remaining components whose cost varies little from car to car.

TABLE 10

INTERMEDIATE STEERING SHAFT ASSEMBLY

| VEHICLE MAKE/MODEL | VEHICLE NO. | A SAFETY SYSTEM COST | B NO. OF VEHICLES PRODUCED | C WEIGHTED COST (A X B) |
|-------------------------|----------------|-------------------------------|-------------------------------------|-------------------------------|
| Chevrolet Caprice | 1 | \$ 7.99 | 676,907 | \$ 5,408,487 |
| Chevrolet Malibu | 2 | 7.77 | 978,105 | 7,599,876 |
| Chevrolet Cavalier | 3 | 11.07 | 1,168,189 | 12,931,852 |
| Ford Crown Victoria | 4 | 8.08 | 152,454 | 1,231,828 |
| Ford LTD | 5 | 6.41 | 420,858 | 2,697,670 |
| Ford Mustang | 6 | 6.41 | 219,159 | 1,404,809 |
| Chrysler Fifth Ave. | 7 | 7.13 | 123,684 | 881,867 |
| Chrysler "E" Class | 8 | 7.07 | 119,009 | 841,394 |
| Plymouth Reliant | 9 | 7.06 | 338,652 | 2,390,883 |
| AMC Renault/Alliance | 10 | 7.62 | 142,205 | 1,083,602 |
| Toyota Tercel | 11 | 4.91 | 147,965 | 726,508 |
| Nissan Sentra | 12 | 5.19 | <u>209,889</u> | <u>1,089,324</u> |
| | | | 4,697,076 | \$38,288,130 |

Safety System Weighted Average Cost = \$8.15.

Safety System Weighted Average Cost - Column B Total Divided By Column A Total.

NUMERICAL ORDER

| MATERIAL TYPE | MATERIAL DESCRIPTION | MATERIAL TYPE | MATERIAL DESCRIPTION | MATERIAL TYPE | MATERIAL DESCRIPTION |
|---------------|----------------------|---------------|----------------------|---------------|----------------------|
| 01 | ACE | 01 | ACETATE | 71 | STEEL & BAGBIT |
| 02 | ADH | 02 | ADHESIVE | 72 | STEEL & BRONZE |
| 03 | ALU | 03 | ALUMINUM | 73 | STEEL & RUBBER |
| 04 | ASB | 04 | ASBESTOS | 74 | STEEL & ALUMINUM |
| 05 | BRZ | 05 | BRASS | 75 | CARBID |
| 06 | BRZ | 06 | BROMIUM | 76 | TIN & LEAD |
| 07 | BRZ | 07 | CAD | 77 | ZINC & PLASTIC |
| 08 | CL | 08 | CADMIUM | 78 | ABS, PLAS |
| 09 | CL | 09 | CADMIUM | 79 | ACRYLATE |
| 10 | CL | 10 | CADMIUM | 80 | FLUORIN |
| 11 | CL | 11 | CADMIUM | 81 | POLYESTER |
| 12 | CL | 12 | CADMIUM | 82 | POLYURETHANE |
| 13 | CL | 13 | CADMIUM | 83 | POLYURETHANE |
| 14 | CL | 14 | CADMIUM | 84 | POLYURETHANE |
| 15 | CL | 15 | CADMIUM | 85 | POLYURETHANE |
| 16 | CL | 16 | CADMIUM | 86 | POLYURETHANE |
| 17 | CL | 17 | CADMIUM | 87 | POLYURETHANE |
| 18 | CL | 18 | CADMIUM | 88 | POLYURETHANE |
| 19 | CL | 19 | CADMIUM | 89 | POLYURETHANE |
| 20 | CL | 20 | CADMIUM | 90 | POLYURETHANE |
| 21 | CL | 21 | CADMIUM | 91 | POLYURETHANE |
| 22 | CL | 22 | CADMIUM | 92 | POLYURETHANE |
| 23 | CL | 23 | CADMIUM | 93 | POLYURETHANE |
| 24 | CL | 24 | CADMIUM | 94 | POLYURETHANE |
| 25 | CL | 25 | CADMIUM | 95 | POLYURETHANE |
| 26 | CL | 26 | CADMIUM | 96 | POLYURETHANE |
| 27 | CL | 27 | CADMIUM | 97 | POLYURETHANE |
| 28 | CL | 28 | CADMIUM | 98 | POLYURETHANE |
| 29 | CL | 29 | CADMIUM | 99 | POLYURETHANE |
| 30 | CL | 30 | CADMIUM | 99 | POLYURETHANE |
| 31 | CL | 31 | CADMIUM | 99 | POLYURETHANE |
| 32 | CL | 32 | CADMIUM | 99 | POLYURETHANE |
| 33 | CL | 33 | CADMIUM | 99 | POLYURETHANE |
| 34 | CL | 34 | CADMIUM | 99 | POLYURETHANE |
| 35 | CL | 35 | CADMIUM | 99 | POLYURETHANE |

ALPHABETICAL ORDER

| MAT'L. NAME | CODE ABBR. | MAT'L. NAME | CODE ABBR. | MAT'L. NAME | CODE ABBR. |
|-------------|------------|-------------|------------|-------------|------------|
| ABS PLASTIC | 80 | GOLD | 90 | STEEL | 71 |
| ACETATE | 01 | HELA | 91 | STEEL | 72 |
| ADHESIVE | 02 | HELA | 92 | STEEL | 73 |
| ALUMINUM | 03 | HELA | 93 | STEEL | 74 |
| ASBESTOS | 04 | HELA | 94 | STEEL | 75 |
| BRASS | 05 | HELA | 95 | STEEL | 76 |
| BROMIUM | 06 | HELA | 96 | STEEL | 77 |
| CAD | 07 | HELA | 97 | STEEL | 78 |
| CADMIUM | 08 | HELA | 98 | STEEL | 79 |
| CADMIUM | 09 | HELA | 99 | STEEL | 80 |
| CADMIUM | 10 | HELA | 99 | STEEL | 81 |
| CADMIUM | 11 | HELA | 99 | STEEL | 82 |
| CADMIUM | 12 | HELA | 99 | STEEL | 83 |
| CADMIUM | 13 | HELA | 99 | STEEL | 84 |
| CADMIUM | 14 | HELA | 99 | STEEL | 85 |
| CADMIUM | 15 | HELA | 99 | STEEL | 86 |
| CADMIUM | 16 | HELA | 99 | STEEL | 87 |
| CADMIUM | 17 | HELA | 99 | STEEL | 88 |
| CADMIUM | 18 | HELA | 99 | STEEL | 89 |
| CADMIUM | 19 | HELA | 99 | STEEL | 90 |
| CADMIUM | 20 | HELA | 99 | STEEL | 91 |
| CADMIUM | 21 | HELA | 99 | STEEL | 92 |
| CADMIUM | 22 | HELA | 99 | STEEL | 93 |
| CADMIUM | 23 | HELA | 99 | STEEL | 94 |
| CADMIUM | 24 | HELA | 99 | STEEL | 95 |
| CADMIUM | 25 | HELA | 99 | STEEL | 96 |
| CADMIUM | 26 | HELA | 99 | STEEL | 97 |
| CADMIUM | 27 | HELA | 99 | STEEL | 98 |
| CADMIUM | 28 | HELA | 99 | STEEL | 99 |
| CADMIUM | 29 | HELA | 99 | STEEL | 99 |
| CADMIUM | 30 | HELA | 99 | STEEL | 99 |
| CADMIUM | 31 | HELA | 99 | STEEL | 99 |
| CADMIUM | 32 | HELA | 99 | STEEL | 99 |
| CADMIUM | 33 | HELA | 99 | STEEL | 99 |
| CADMIUM | 34 | HELA | 99 | STEEL | 99 |
| CADMIUM | 35 | HELA | 99 | STEEL | 99 |

APPENDIX A
ABBREVIATIONS FOR MATERIALS
PART NUMBERING SYSTEM
COST SHEETS AND PHOTOGRAPHS

PART NUMBERING SYSTEM

The part numbers are derived from a "Master Bill of Material" that contains all of the component parts and subassemblies for a given assembly or system. Thus a glove compartment release knob for a Chevrolet will appear on the same line of its Bill of Material, and have the same item number as any glove compartment release knob for any vehicle in the study. Following is a detailed breakdown and explanation of the numbering system.

| | | | |
|---------------------------|------|---------------------------------|------------------------|
| Ford (Full Size) 04 | 1983 | Board 4 (Seat Back Pad) 4 | Border Wire 04A |
|---------------------------|------|---------------------------------|------------------------|

A-1a

Vehicle

The first and second numbers indicate mfg. and model (car size) (01-22).

Year

The third and fourth numbers indicate the year (1963-1983).

Photograph Number

The fifth number is the photograph board number (1-7).

Item Number

The sixth, seventh and eighth (when necessary) numbers indicate the part as it appears on the Master Part List, Detail Process Sheet, Computer Cost Sheet and Photograph.

VEHICLE- I01

| DESCRIPTION | ITEM NO. | QTY | MTRL | WEIGHT | VARIABLE MANUFACTURING COST | | | TOTAL | WHOLESALE CONSUMER TOOLING | | |
|---------------------------|----------|-----|------|---------|-----------------------------|--------|--------|---------|----------------------------|---------|--------|
| | | | | | MATERIAL | LABOR | BURDEN | | PRICE | PRICE | PRICE |
| TOTAL COST ALL PARTS | | | | | | | | | | | |
| CHEVROLET CAPRICE | 01 | 1 | | 15.8035 | 8.1731 | 3.9443 | 5.1406 | 17.2580 | 24.7986 | 28.1719 | 1640.0 |
| CHEVROLET MALIBU | 02 | 1 | | 15.0455 | 7.8428 | 4.0089 | 5.2571 | 17.1088 | 24.5837 | 27.9280 | 1605.0 |
| CHEVROLET CAVALIER | 03 | 1 | | 10.2040 | 8.2656 | 4.8285 | 6.7133 | 19.8074 | 28.4626 | 32.3340 | 1558.5 |
| FORD CROWN VICTORIA | 04 | 1 | | 15.9348 | 12.7642 | 4.5319 | 5.8654 | 23.1615 | 33.2835 | 37.8105 | 1331.0 |
| FORD LTD | 05 | 1 | | 14.2683 | 9.8390 | 4.2331 | 5.5965 | 19.6686 | 28.2642 | 32.1085 | 1154.0 |
| FORD MUSTANG | 06 | 1 | | 10.4744 | 7.7522 | 3.1311 | 4.0390 | 14.9223 | 21.4435 | 24.3603 | 923.0 |
| CHRYSLER FIFTH AVENUE | 07 | 1 | | 10.2939 | 9.9268 | 3.5063 | 5.0228 | 18.4559 | 26.5214 | 30.1288 | 1269.5 |
| CHRYSLER E-CLASS | 08 | 1 | | 10.4757 | 10.2748 | 3.5785 | 4.8598 | 18.7131 | 26.8910 | 30.5487 | 1197.5 |
| CHRYSLER/PLYMOUTH RELIANT | 09 | 1 | | 10.5135 | 10.2970 | 3.5688 | 4.8705 | 18.7363 | 26.9243 | 30.5867 | 1207.5 |
| AMC/RENAULT ALLIANCE | 10 | 1 | | 4.8699 | 4.3109 | 2.5402 | 3.2293 | 10.0804 | 14.4858 | 16.4559 | 843.0 |
| TOYOTA TERCEL | 11 | 1 | | 8.1484 | 9.4084 | 3.2470 | 4.3406 | 16.9962 | 24.4241 | 27.7464 | 991.0 |
| NISSAN SENTRA | 12 | 1 | | 6.0825 | 7.2868 | 3.0766 | 3.7096 | 14.0730 | 20.2233 | 22.9742 | 1060.0 |

VEHICLE- 01- CHEVROLET CAPRICE

| DESCRIPTION | ITEM NO. | QTY | MTRL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|-----------------------------------|----------|-----|------|---------|-----------------------------|--------|--------|----------------------------|---------|---------|--------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| CHEVROLET CAPRICE | | 1 | | 15.8035 | 8.1731 | 3.9443 | 5.1406 | 17.2580 | 24.7986 | 28.1719 | 1640.0 |
| ASM - SHIFTING TUBE | 183501 | 1 | ASSY | 1.8487 | .7119 | .6354 | .8120 | 2.1593 | 3.1030 | 3.5251 | 137.0 |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | 4.3737 | 1.7668 | .4921 | .8610 | 3.1199 | 4.4820 | 5.0918 | 605.0 |
| ASM - STRG. COL. MTG. BRACKET | 183541 | 1 | ASSY | 1.3315 | .6038 | .0774 | .1069 | .7881 | 1.1326 | 1.2865 | 135.0 |
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | 3.7740 | 1.9627 | .5231 | .7178 | 3.2036 | 4.6037 | 5.2298 | 112.0 |
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | ASSY | 4.4756 | 3.1279 | 2.2163 | 2.6429 | 7.9871 | 11.4773 | 13.0387 | 651.0 |
| ASSEMBLY COST | | | | | | | | | | | |

VEHICLE- 01- CHEVROLET CAPRICE

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | VARIABLE LABOR | MANUFACTURING BURDEN | COST TOTAL | WHOLESALE PRICE | CONSUMER PRICE | TOOLING 000S |
|------------------------------|----------|-----|------|--------|----------|----------------|----------------------|------------|-----------------|----------------|--------------|
| ASM - SHIFTING TUBE | 83501 | 1 | ASSY | 1.8487 | .7119 | .6354 | .8120 | 2.1593 | 3.1030 | 3.5251 | 137.0 |
| SHIFTING TUBE - UPPER | 83502 | 1 | CRS | .8839 | .2880 | .2835 | .3532 | .9247 | 1.3288 | 1.5095 | 45.0 |
| RETAINING CLIP | 83503 | 2 | ABS | .0018 | .0242 | | | .0242 | .0348 | .0396 | 17.0 |
| SHIFTING TUBE - LOWER | 83505 | 1 | CRS | .8625 | .2565 | .2513 | .3130 | .8208 | 1.1795 | 1.3399 | 35.0 |
| LEVER - TRANSMISSION LINKAGE | 83506 | 1 | HRS | .0985 | .1352 | .0153 | .0348 | .1853 | .2663 | .3025 | 20.0 |
| COLLAR (FOAM) | 83510 | 1 | PLYF | .0020 | .0050 | | | .0050 | .0072 | .0082 | |
| ASSEMBLY COST | | | | | .0030 | .0853 | .1110 | .1993 | .2864 | .3254 | 20.0 |

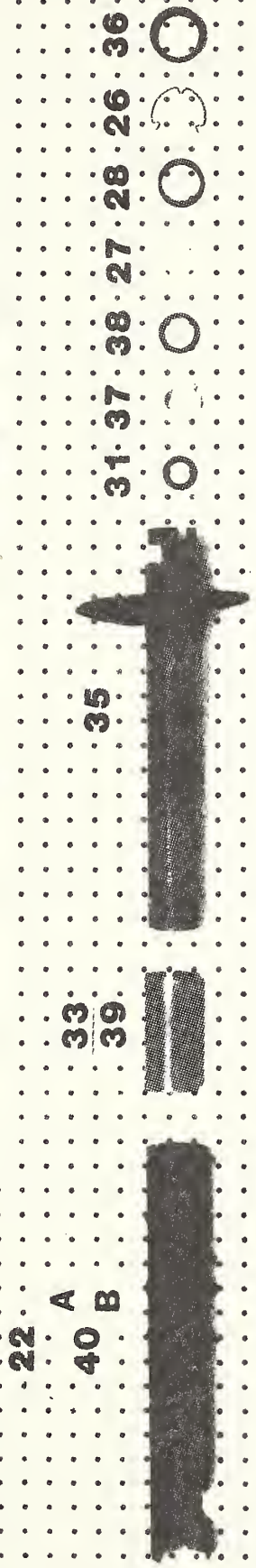
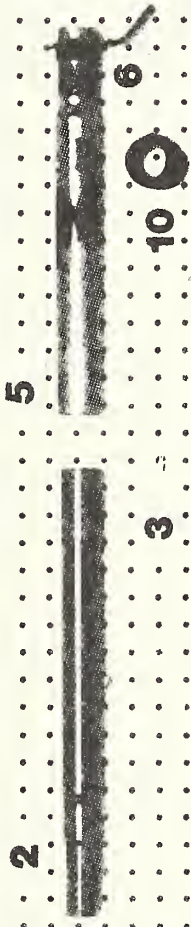
VEHICLE- 01- CHEVROLET CAPRICE

| DESCRIPTION | ITEM NO. | QTY | MTRL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|-----------------------------------|----------|-----|------|--------|-----------------------------|-------|--------|----------------------------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | 4.3737 | 1.7668 | .4921 | .8610 | 3.1199 | 4.4820 | 5.0918 | 605.0 |
| JACKET (HOUSING) - STRG COL UFFER | 183522 | 1 | HRS | 2.0950 | .6509 | .1013 | .2217 | .9739 | 1.3995 | 1.5898 | 80.0 |
| RETAINER - CAP - JACKET HSG. | 183526 | 1 | STWR | .0061 | .0033 | .0032 | .0051 | .0116 | .0167 | .0190 | 10.0 |
| SPACER - JACKET HSG. STRG. COL. | 183527 | 1 | PLAS | .0019 | .0031 | .0032 | .0046 | .0109 | .0157 | .0178 | 20.0 |
| SPRING | 183528 | 1 | STWR | .0314 | .0750 | | | .0750 | .1078 | .1225 | |
| SEAL - STRG. COL. JACKET | 183531 | 1 | RUB | .0041 | .0164 | .0349 | .0414 | .0927 | .1332 | .1533 | 40.0 |
| SLEEVE - STRG. COL. JACKET | 183533 | 1 | PLY | .1149 | .0937 | .0606 | .1726 | .3269 | .4698 | .5337 | 215.0 |
| JACKET (HOUSING) - STRG COL LOWER | 183535 | 1 | HRS | 1.9132 | .5570 | .1013 | .2217 | .8800 | 1.2646 | 1.4366 | 80.0 |
| CAP - JACKET LWR. - STRG. COL. | 183536 | 1 | CRS | .0423 | .0297 | .0068 | .0229 | .0594 | .0854 | .0970 | 75.0 |
| RETAINER SLEEVE - JACKET HSG. | 183537 | 1 | PLAS | .0389 | .0628 | .0255 | .0296 | .1179 | .1694 | .1924 | 25.0 |
| SEAL - STRG. COL. JACKET | 183538 | 1 | RUB | .0079 | .0306 | .0349 | .0414 | .1069 | .1536 | .1745 | 40.0 |
| BEARING (SLEEVE) | 183539 | 40 | STL | .0120 | .0400 | | | .0400 | .0560 | .0640 | |
| M6 WELD NUT | 183540A | 2 | STL | .0240 | .0540 | | | .0540 | .0776 | .0882 | |
| M8 WELD NUT | 183540B | 4 | STL | .0820 | .1400 | | | .1400 | .2012 | .2284 | |
| ASSEMBLY COST | | | | | .0103 | .1204 | .1000 | .2307 | .3315 | .3766 | 20.0 |

VEHICLE- 01- CHEVROLET CAPRICE

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|--------------------------------|----------|-----|----------|--------|-----------------------------|-------|--------|----------------------------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - STRG. COL. MTG. BRACKET | 183541 | 1 | ASSY | 1.3315 | .6038 | .0774 | .1069 | .7881 | 1.1326 | 1.2865 | 135.0 |
| BRACKET - STRG. COL. MTG. | 183542 | 1 | THRS | 1.2581 | .5111 | .0134 | .0316 | .5561 | .7991 | .9078 | 75.0 |
| SPACER - STRG. COL. MTG. BRKT. | 183543 | 2 | ZN | .0726 | .0398 | .0118 | .0402 | .0918 | .1320 | .1500 | 40.0 |
| SPACER NUT LOCK | 183552 | 4 | PLAS | .0008 | .0520 | | | .0520 | .0748 | .0848 | |
| ASSEMBLY COST | | | | | .0009 | .0522 | .0351 | .0882 | .1267 | .1439 | 20.0 |

1983 CHEVROLET CAPRICE BOARD 5



IN 6 12
CM 15 30

VEHICLE- 01- CHEVROLET CAPRICE

| DESCRIPTION | ITEM NO. | QTY | MTRL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | WHOLESALE CONSUMER TOOLING | | | |
|-----------------------|----------|-----|------|--------|-----------------------------|-------|-------|----------------------------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | | PRICE | PRICE | | |
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | 3.7740 | 1.9627 | .5231 | .7178 | 3.2036 | 4.6037 | 5.2298 | 112.0 |
| SHAFT - UPPER - STRG. | 183602 | 1 | CKS | 1.9397 | .7265 | .2285 | .4266 | 1.3816 | 1.9854 | 2.2554 | 30.0 |
| SHAFT - LOWER - STRG. | 183604 | 1 | HRS | 1.7504 | .5491 | .1238 | .1552 | .8281 | 1.1900 | 1.3518 | 28.0 |
| CLIP - STRG. SHAFT | 183606 | 2 | PLAS | .0026 | .0042 | .0076 | .0092 | .0210 | .0302 | .0344 | 35.0 |
| BEARING | 183610 | 1 | STL | .0779 | .6000 | | | .6000 | .8622 | .9795 | |
| RETAINER RING | 183612 | 2 | STL | .0034 | .0800 | | | .0800 | .1150 | .1306 | |
| ASSEMBLY COST | | | | | .0029 | .1632 | .1268 | .2929 | .4209 | .4781 | 19.0 |

VEHICLE- 01- CHEVROLET CAPRICE

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | 1:ASSY | 4.4756 | 3.1279 | 2.2163 | 2.6429 | 7.9871 | WHOLESALE | | CONSUMER | |
|------------------------------------|----------|-----|----------|--------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|---------|
| | | | | | | | | | | | PRICE | TOTAL | PRICE | TOOLING |
| | | | | | | | | | | | PRICE | PRICE | PRICE | PRICE |
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | ASSY | 4.4756 | 1 | 4.4756 | 3.1279 | 2.2163 | 2.6429 | 7.9871 | 11.4773 | 13.0387 | 651.0 | |
| FLANGE - UPPER COUPLING | 183622 | 1 | HRS | .5617 | 1 | .5617 | .1789 | .1698 | .4998 | .8485 | 1.2193 | 1.3851 | 55.0 | |
| SHAFT - UPPER | 183623 | 1 | CRS | 1.2931 | 1 | 1.2931 | .7490 | .3209 | .3273 | 1.3972 | 2.0078 | 2.2809 | 50.0 | |
| SPRING - INNER SHAFT RETAINER | 183624 | 1 | SSTL | .0242 | 1 | .0242 | .0256 | .0048 | .0129 | .0433 | .0622 | .0707 | 15.0 | |
| TUBE SHAFT - LOWER - OUTER | 183625 | 1 | HRS | 1.1554 | 1 | 1.1554 | .3723 | .0538 | .0512 | .4773 | .6859 | .7792 | 15.0 | |
| FLANGE - FLEX COUPLING - LWR SHAFT | 183626 | 1 | HRS | .1011 | 1 | .1011 | .0530 | .0170 | .0369 | .1069 | .1536 | .1745 | 20.0 | |
| COVER - INTER. SHAFT | 183627 | 1 | ABS | .2133 | 1 | .2133 | .3764 | | | .3764 | .5409 | .6145 | 35.0 | |
| ASH - SEAL COUPLING | 183628 | 1 | ASSY | .0939 | 1 | .0939 | .2439 | | | .2439 | .3505 | .3982 | 55.0 | |
| SEAL - INTER. SHAFT | 183629 | 1 | RUB | .0220 | 1 | .0220 | .1009 | | | .1009 | .1450 | .1647 | 35.0 | |
| INNER CONE - COUPLING HSG. UPR. | 183630 | 1 | HRS | .0187 | 1 | .0187 | .0104 | .0048 | .0127 | .0279 | .0401 | .0456 | 20.0 | |
| KNUCKLE - UPPER COUPLING | 183631 | 2 | IPM | .0734 | 2 | .1468 | .0330 | .0874 | .1726 | .2930 | .4210 | .4782 | 41.0 | |
| PIN - KNUCKLE MOUNTING | 183632 | 1 | CRS | .0579 | 1 | .0579 | .0237 | .0057 | .0201 | .0495 | .0711 | .0808 | 15.0 | |
| RETAINING CLIP - UPR. COUPLING | 183633 | 1 | STL | .0040 | 1 | .0040 | .0337 | | | .0337 | .0484 | .0550 | 30.0 | |
| NYLON BUSHING - UPR. COUPLING | 183634 | 1 | NY | .0022 | 1 | .0022 | .0551 | | | .0551 | .0792 | .0900 | 32.0 | |
| RETAINING RING - UPR. COUPLING | 183635 | 1 | HRS | .0402 | 1 | .0402 | .0412 | | | .0412 | .0592 | .0673 | 10.0 | |
| CLAMP - UPR. COUPLING SEAL | 183636 | 1 | STL | .0113 | 1 | .0113 | .0330 | | | .0330 | .0474 | .0538 | 20.0 | |
| FLEX PLATE - COUPLING (RAG) LWR. | 183649 | 1 | RFB | .1120 | 1 | .1120 | .1275 | .0407 | .0479 | .2161 | .3105 | .3527 | 10.0 | |
| PLATE - FLEX PLATE TO FLANGE | 183650 | 1 | G/ST | .0840 | 1 | .0840 | .0627 | .0459 | .1051 | .2137 | .3071 | .3489 | 20.0 | |
| PLATE - FLEX PLATE TO FLANGE | 183650A | 1 | G/ST | .0510 | 1 | .0510 | .0311 | .0119 | .0361 | .0791 | .1137 | .1292 | 11.0 | |
| BOLT - FLANGE TO SHAFT LWR. CPLG. | 183651 | 1 | CRS | .0380 | 1 | .0380 | .0470 | | | .0470 | .0675 | .0767 | | |
| PIN - FLEX PLATE TO FLANGE | 183652 | 2 | CRS | .1040 | 2 | .2080 | .0560 | | | .0560 | .0804 | .0914 | | |
| BOLT - FLEX PLATE TO FLANGE | 183653 | 2 | CRS | .0900 | 2 | .1800 | .1500 | | | .1500 | .2156 | .2450 | | |
| ADAPTOR - FLEX PLATE TO SHAFT | 183654 | 1 | FRG | .2910 | 1 | .2910 | .1790 | .2293 | .3467 | .7550 | 1.0849 | 1.2324 | 112.0 | |
| NUT | 183655 | 2 | CRS | .0280 | 2 | .0560 | .0620 | | | .0620 | .0890 | .1012 | | |

VEHICLE- 01- CHEVROLET CAPRICE

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | CONSUMER | LOADING |
|---------------|----------|-----|------|--------|----------|--------|--------|--------|--------|-------|----------|---------|
| LOCKWASHER | 183656 | 1 | | .0052 | .0100 | | | .0100 | .0144 | | .0144 | |
| ASSEMBLY COST | | | | | .0725 | 1.2243 | .9736 | 2.2704 | 3.2626 | | 3.7063 | 50.0 |

VEHICLE - 01 - CHEVROLET CAPRICE

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | WHOLESALE | | CONSUMER | |
|------------------------|----------|-----|----------|--------|-----------------------------|-----------|-------|----------|-------|
| | | | | | | PRICE | TOTAL | PRICE | PRICE |
| ASM - SEAL COUPLING | 183628 | 1 | ASSY | .0939 | .2439 | .2439 | .3505 | .3982 | 55.0 |
| INSERT - SEAL COUPLING | 183628A | 1 | HRS | .0821 | .0919 | .0919 | .1331 | .1501 | 15.0 |
| RUBBER - SEAL COUPLING | 183628B | 1 | RUB | .0118 | .0099 | .0099 | .0142 | .0161 | |
| ASSEMBLY COST | | | | | .1421 | .1421 | .2042 | .2320 | 40.0 |

1983 CHEVROLET CAPRICE BOARD 6



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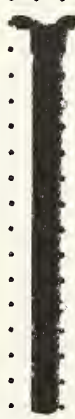
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36 35



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56 52



54 53

VEHICLE- 02- CHEVROLET MALIBU

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | WHOLESALE CONSUMER | LOADING |
|-----------------------------------|----------|-----|------|---------|----------|--------|--------|---------|--------------------|---------|
| | | | | | | | | | PRICE | PRICE |
| CHEVROLET MALIBU | | 1 | | 15.0455 | 7.8428 | 4.0089 | 5.2571 | 17.1088 | 24.5837 | 27.9280 |
| ASM - SHIFTING TUBE | 183501 | 1 | ASSY | 1.6986 | .8587 | .5044 | .7483 | 2.1114 | 3.0341 | 3.4468 |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | 4.2037 | 1.7097 | .4889 | .8564 | 3.0550 | 4.3887 | 4.9852 |
| ASM - STRG. COL. MTG. BRACKET | 183541 | 1 | ASSY | 1.2721 | .5802 | .0774 | .1069 | .7645 | 1.0986 | 1.2479 |
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | 3.8179 | 2.1192 | .5487 | .7370 | 3.4049 | 4.8928 | 5.5583 |
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | ASSY | 4.0532 | 2.5750 | 2.3895 | 2.8085 | 7.7730 | 11.1695 | 12.6891 |
| ASSEMBLY COST | | | | | | | | | | |

VEHICLE- 02- CHEVROLET MALIBU

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | WHOLESALE CONSUMER TOOLING | | | | |
|------------------------|----------|-----|----------|--------|-----------------------------|-------|----------------------------|--------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | TOTAL | PRICE | PRICE | | |
| ASM - SHIFTING TUBE | 183501 | 1 | 1:ASSY: | 1.6986 | .8587 | .5044 | .7483 | 2.1114 | 3.0341 | 3.4468 | 157.0 |
| SHIFTING TUBE - UPPER | 183502 | 1 | 1:STB: | .7341 | .3641 | .1474 | .2401 | .7516 | 1.0800 | 1.2269 | 25.0 |
| CLIP | 183503 | 2 | 1:PLAS: | .0026 | .0040 | | | .0040 | .0058 | .0066 | |
| SHIFTING TUBE - LOWER | 183505 | 1 | 1:STB: | .8248 | .3779 | .1698 | .3037 | .8514 | 1.2235 | 1.3899 | 42.0 |
| LEVER - SHIFTING TUBE | 183506 | 1 | 1:CRS: | .1305 | .0959 | .0139 | .0364 | .1462 | .2101 | .2387 | 50.0 |
| COLLAR - SHIFTING TUBE | 183510 | 1 | 1:PLAS: | .0044 | .0108 | .0474 | .0610 | .1192 | .1713 | .1946 | 10.0 |
| SLEEVE - SHIFTING TUBE | 183512 | 1 | 1:PLAS: | .0022 | .0038 | .0064 | .0068 | .0170 | .0244 | .0277 | 15.0 |
| ASSEMBLY COST | | | | | .0022 | .1195 | .1003 | .2220 | .3190 | .3624 | 15.0 |

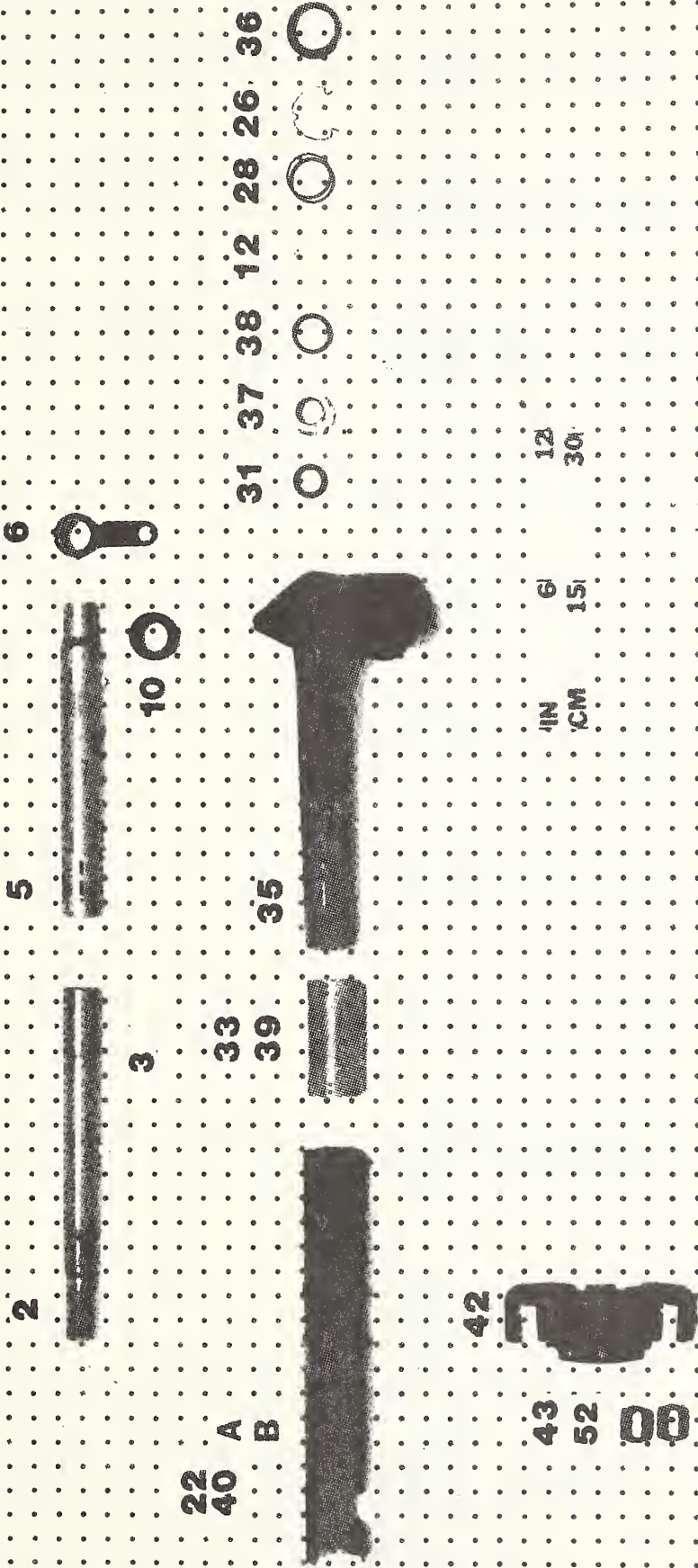
VEHICLE- 02- CHEVROLET MALIBU

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|-----------------------------------|----------|-----|------|--------|-----------------------------|-------|--------|----------------------------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - STEERING COLUMN JACKET | 83521 | 1 | ASSY | 4.2037 | 1.7097 | .4889 | .8564 | 3.0550 | 4.3887 | 4.9859 | 585.0 |
| JACKET (HOUSING) - STRG COL UPPER | 83522 | 1 | HRS | 2.0950 | .6509 | .4013 | .2217 | .9739 | 1.3995 | 1.5898 | 80.0 |
| RETAINER - CAP - JACKET HSG. | 83526 | 1 | STWR | .0061 | .0033 | .0032 | .0051 | .0116 | .0167 | .0190 | 10.0 |
| SPRING | 83528 | 1 | STWR | .0286 | .0750 | | | .0750 | .1078 | .1235 | |
| SEAL - STRG. COL. JACKET | 83531 | 1 | RUB | .0041 | .0164 | .0349 | .0414 | .0927 | .1332 | .1513 | 40.0 |
| SLEEVE - STRG. COL. JACKET | 83533 | 1 | PLY | .1149 | .0937 | .0606 | .1726 | .3269 | .4698 | .5337 | 215.0 |
| JACKET (HOUSING) - STRG COL LOWER | 83535 | 1 | HRS | 1.7403 | .5012 | .1013 | .2217 | .8242 | 1.1844 | 1.3455 | 80.0 |
| CAP - JACKET LWR. - STRG. COL. | 83536 | 1 | CRS | .0488 | .0297 | .0068 | .0229 | .0594 | .0854 | .0970 | 75.0 |
| RETAINER SLEEVE - JACKET HSG. | 83537 | 1 | PLAS | .0400 | .0646 | .0255 | .0296 | .1197 | .1720 | .1954 | 25.0 |
| SEAL - STRG. COL. JACKET | 83538 | 1 | RUB | .0079 | .0306 | .0349 | .0414 | .1069 | .1536 | .1745 | 40.0 |
| BEARING (SLEEVE) | 83539 | 40 | STL | .0120 | .0400 | | | .0400 | .0560 | .0640 | |
| M6 WELD NUT | 83540A | 2 | STL | .0240 | .0540 | | | .0540 | .0776 | .0882 | |
| M6 WELD NUT | 83540B | 4 | STL | .0820 | .1400 | | | .1400 | .2012 | .2284 | |
| ASSEMBLY COST | | | | | .0103 | .1204 | .1000 | .2307 | .3315 | .3766 | 20.0 |

VEHICLE- 02- CHEVROLET MALIBU

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE CONSUMER TOOLING | | |
|--------------------------------|----------|-----|----------|--------|-----------------------------|-------|--------|-------|----------------------------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - STRG. COL. MTG. BRACKET | 183541 | 1 | ASSY | 1.2721 | .5802 | .0774 | .1069 | .7645 | 1.0986 | 1.2479 | 125.0 |
| BRACKET - STRG. COL. MTG. | 183542 | 1 | HRS | 1.2423 | .5111 | .0134 | .0316 | .5561 | .7991 | .9078 | 75.0 |
| SPACER - STRG. COL. MTG. BRKT. | 183543 | 2 | ZN | .0290 | .0162 | .0118 | .0402 | .0682 | .0980 | .1114 | 40.0 |
| SPACER NUT LOCK | 183552 | 4 | PLAS | .0008 | .0520 | | | .0520 | .0748 | .0848 | |
| ASSEMBLY COST | | | | | .0009 | .0522 | .0351 | .0882 | .1267 | .1439 | 10.0 |

1983 CHEVROLET MALIBU BOARD 5



VEHICLE- 02- CHEVROLET MALIBU

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE CONSUMER | | |
|--------------------------------|----------|-----|----------|--------|-----------------------------|--------|-------|--------|--------------------|--------|------|
| | | | | | LABOR | BURDEN | PRICE | PRICE | PRICE | PRICE | |
| ASM - STEERING SHAFT | 83601 | 1 | ASSY | 3.8179 | 2.1192 | .5487 | .7370 | 3.4049 | 4.8928 | 5.5583 | 87.0 |
| SHAFT - STEERING UPPER | 83602 | 1 | CRS | 1.9291 | .8475 | .2285 | .4266 | 1.5026 | 2.1592 | 2.4529 | 30.0 |
| SHAFT - LOWER STEERING | 83604 | 1 | HRS | 1.7985 | .5612 | .1238 | .1552 | .8402 | 1.2074 | 1.3716 | 28.0 |
| BEARING - STRG. SHAFT | 83610 | 1 | STL | .0774 | .6000 | | | .6000 | .8622 | .9795 | |
| RETAINER RING - STRG. SHAFT | 83612 | 2 | STL | .0036 | .0800 | | | .0800 | .1150 | .1306 | |
| WASHER - STRG. SHAFT | 83612A | 1 | STL | .0063 | .0250 | | | .0250 | .0359 | .0408 | |
| PLASTIC RETAINER - STRG. SHAFT | 83616 | 2 | PLAS | .0030 | .0020 | | | .0020 | .0028 | .0032 | |
| ASSEMBLY COST | | | | | .0035 | .1964 | .1552 | .3551 | .5103 | .5797 | 29.0 |

VEHICLE - 02 - CHEVROLET MALIBU

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | WHOLESALE PRICE | CONSUMER TOOLING |
|------------------------------------|----------|-----|------|--------|----------|--------|--------|--------|-----------------|------------------|
| ASM - INTERMEDIATE STEERING SHAFT | 83621 | 1 | ASSY | 4.0532 | 2.5750 | 2.3895 | 2.8085 | 7.7730 | 11.1695 | 12.6891 |
| FLANGE - UPPER COUPLING | 83622 | 1 | HRS | .5617 | .1788 | .1698 | .4878 | .8364 | 1.2019 | 1.3654 |
| SHAFT - UPPER | 83623 | 1 | CRS | 1.1396 | .5521 | .3209 | .3273 | 1.2003 | 1.7248 | 1.9594 |
| SPRING - INR. SHAFT RET. | 83624 | 1 | SSTL | .0242 | .0256 | .0048 | .0129 | .0433 | .0622 | .0707 |
| TUBE SHAFT - LOWER - OUTER | 83625 | 1 | STTB | .9099 | .5058 | .0538 | .0512 | .6108 | .8777 | .9971 |
| FLANGE - FLEX COUPLING - LWR. SHAF | 83626 | 1 | HRS | .1011 | .0530 | .0170 | .0369 | .1069 | .1536 | .1745 |
| COVER - INTERMEDIATE SHAFT | 83627 | 1 | PLAS | .1899 | .2263 | .0430 | .0345 | .3038 | .4366 | .4960 |
| ASM - SEAL COUPLING | 83628 | 1 | ASSY | .0939 | .0583 | .0841 | .0826 | .2250 | .3233 | .3673 |
| SEAL - INTERMEDIATE SHAFT | 83629 | 1 | RUB | .0220 | .0166 | .0343 | .0342 | .0851 | .1223 | .1389 |
| INNER CONE - COUPLING HSG. UPPER | 83630 | 1 | HRS | .0187 | .0104 | .0048 | .0127 | .0279 | .0401 | .0456 |
| KNUCKLE - UPPER COUPLING | 83631 | 2 | IFM | .0734 | .0330 | .0874 | .1726 | .2930 | .4210 | .4782 |
| PIN - KNUCKLE MOUNTING | 83632 | 1 | CRS | .0579 | .0237 | .0057 | .0201 | .0495 | .0711 | .0808 |
| RETAINING CLIP - UPR. COUPLING | 83633 | 1 | STL | .0040 | .0055 | .0051 | .0117 | .0223 | .0320 | .0364 |
| NYLON BUSHING - UPR. COUPLING | 83634 | 1 | NY | .0022 | .0530 | | | .0530 | .0762 | .0866 |
| RETAINING RING - UPR. COUPLING | 83635 | 1 | HRS | .0402 | .0231 | .0032 | .0076 | .0339 | .0487 | .0553 |
| CLAMP - UPR. COUPLING SEAL | 83636 | 1 | STL | .0113 | .0120 | .0035 | .0070 | .0225 | .0323 | .0367 |
| FLEX PLATE - COUPLING (RAG) LWR. | 83649 | 1 | REFB | .1120 | .1275 | .0407 | .0479 | .2161 | .3105 | .3527 |
| PLATE - FLEX PLATE TO FLANGE | 83650 | 1 | G/ST | .0840 | .0627 | .0459 | .1051 | .2137 | .3071 | .3489 |
| PLATE - FLEX PLATE TO FLANGE | 83650A | 1 | G/ST | .0510 | .0311 | .0119 | .0361 | .0791 | .1137 | .1292 |
| BOLT - FLANGE TO SHAFT LWR. CPLG. | 83651 | 1 | CRS | .0380 | .0470 | | | .0470 | .0675 | .0767 |
| PIN - FLEX PLATE TO FLANGE | 83652 | 2 | CRS | .1040 | .0560 | | | .0560 | .0804 | .0914 |
| BOLT - FLEX PLATE TO FLANGE | 83653 | 2 | CRS | .0900 | .1500 | | | .1500 | .2156 | .2450 |
| ADAPTOR - FLEX PLATE TO SHAFT | 83654 | 1 | FRG | .2910 | .1790 | .2393 | .3467 | .7550 | 1.0849 | 1.2324 |
| NUT | 83655 | 2 | CRS | .0280 | .0620 | | | .0620 | .0890 | .1012 |

VEHICLE- 02- CHEVROLET MALIBU

| ITEM NO. | DESCRIPTION | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | CONSUMER PRICE | TOOLING |
|----------|---------------|-----|------|--------|----------|--------|--------|--------|--------|----------------|---------|
| 183656 | LOCKWASHER | 2 | CRS | .0052 | .0100 | | | .0100 | .0144 | .0164 | |
| | ASSEMBLY COST | | | | .0725 | 1.2243 | .9736 | 2.2704 | 3.2626 | 3.7063 | 50.0 |

VEHICLE- 02- CHEVROLET MALIBU

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|------------------------|----------|-----|----------|--------|-----------------------------|-------|--------|----------------------------|-------|-------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - SEAL COUPLING | 83628 | 1 | ASSY | .0939 | .0583 | .0841 | .0826 | .2250 | .3233 | .3673 | 55.0 |
| INSERT - SEAL COUPLING | 83628A | 1 | HRS | .0821 | .0484 | .0051 | .0217 | .0752 | .1081 | .1228 | 15.0 |
| RUBBER - SEAL COUPLING | 83628B | 1 | RUB | .0118 | .0085 | | | .0085 | .0122 | .0139 | |
| ASSEMBLY COST | | | | | .0014 | .0790 | .0609 | .1413 | .2030 | .2306 | 40.0 |

1983 CHEVROLET MALIBU BOARD 6



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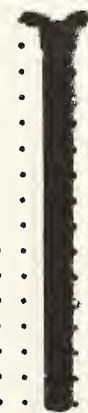
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CHEVROLET CAVALIER

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | WHOLESALE PRICE | CONSUMER PRICE | TOOLING |
|-----------------------------------|----------|-----|------|---------|----------|--------|--------|---------|-----------------|----------------|---------|
| CHEVROLET CAVALIER | | 1 | | 10.2040 | 8.2656 | 4.8285 | 6.7133 | 19.8074 | 28.4626 | 32.3340 | 1558.5 |
| ASM - SHIFTING TUBE | 83501 | 1 | ASSY | 1.2054 | .7624 | .4387 | .5340 | 1.7351 | 2.4933 | 2.8325 | 177.0 |
| ASM - STEERING COLUMN JACKET | 83521 | 1 | ASSY | 2.5600 | 1.9828 | .4478 | .8191 | 3.2517 | 4.6716 | 5.3072 | 435.0 |
| ASM - STRG. COL. MTG. BRACKET | 83541 | 1 | ASSY | .9811 | .5329 | .1030 | .1425 | .7784 | 1.1187 | 1.2707 | 135.0 |
| ASM - STEERING SHAFT | 83601 | 1 | ASSY | 2.8108 | 1.7906 | .5030 | .6790 | 2.9726 | 4.2715 | 4.8524 | 82.0 |
| ASM - INTERMEDIATE STEERING SHAFT | 83621 | 1 | ASSY | 2.6467 | 3.1969 | 3.3340 | 4.5387 | 11.0696 | 15.9075 | 18.0712 | 729.5 |
| ASSEMBLY COST | | | | | | | | | | | |

VEHICLE- 03- CHEVROLET CAVALIER

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | TOOLING |
|------------------------|----------|-----|------|--------|----------|-------|--------|--------|--------|--------|---------|
| | | | | | | | | | | | |
| ASM - SHIFTING TUBE | 183501 | 1 | ASSY | 1.2054 | .7624 | .4387 | .5340 | 1.7351 | 2.4933 | 2.8325 | 177.0 |
| SHIFTING TUBE - UPPER | 183502 | 1 | STTB | .4966 | .3030 | .1590 | .2057 | .6677 | .9595 | 1.0900 | 34.0 |
| CLIP | 183503 | 2 | NY | .0010 | .0020 | | | .0020 | .0028 | .0032 | |
| SHIFTING TUBE - LOWER | 183505 | 1 | STTB | .4220 | .2560 | .1421 | .1865 | .5846 | .8401 | .9544 | 33.0 |
| LEVER - SHIFTING TUBE | 183506 | 1 | CRS | .2507 | .1715 | .0121 | .0346 | .2182 | .3136 | .3562 | 50.0 |
| SLEEVE - SHIFTING TUBE | 183512 | 1 | PLYP | .0343 | .0273 | .0032 | .0046 | .0351 | .0504 | .0573 | 30.0 |
| SPRING - SHIFTING TUBE | 183513 | 1 | CRS | .0008 | .0004 | .0028 | .0023 | .0055 | .0079 | .0090 | 15.0 |
| ASSEMBLY COST | | | | | .0022 | .1195 | .1003 | .2220 | .3190 | .3624 | 15.0 |

VEHICLE- 03- CHEVROLET CAVALIER

| DESCRIPTION | ITEM NO. | QTY | MTRL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|-----------------------------------|----------|-----|------|--------|-----------------------------|-------|--------|----------------------------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - STEERING COLUMN JACKET | 83521 | 1 | ASSY | 2.5600 | 1.9828 | .4498 | .8191 | 3.2517 | 4.6716 | 5.3072 | 435.0 |
| JACKET (HOUSING) - STRG COL UPPER | 83522 | 1 | HRS | 1.3241 | .4448 | .1013 | .2251 | .7716 | 1.1088 | 1.2596 | 80.0 |
| SPRING | 83528 | 1 | STWR | .0337 | .0750 | | | .0750 | .1078 | .1225 | |
| SEAT - SPRING - JACKET HSG. | 83529 | 1 | PLY | .0022 | .0014 | .0038 | .0046 | .0098 | .0141 | .0160 | 20.0 |
| BEARING | 83532 | 1 | STL | .0600 | .7500 | | | .7500 | 1.0778 | 1.2244 | |
| SLEEVE - STRG. COL. JACKET | 83533 | 1 | PLY | .0480 | .0405 | .0606 | .1726 | .2737 | .3933 | .4468 | 165.0 |
| JACKET (HOUSING) - STRG COL LOWER | 83535 | 1 | HRS | .7262 | .2608 | .1013 | .2217 | .5938 | .8389 | .9530 | 80.0 |
| CAP - STRG. COL. LWR. JACKET | 83536 | 1 | ZN | .1496 | .0813 | .0119 | .0402 | .1334 | .1917 | .2178 | 25.0 |
| RETAINER SLEEVE - JACKET HSG. | 83537 | 1 | PLAS | .0245 | .0397 | .0255 | .0296 | .0948 | .1362 | .1547 | 25.0 |
| BEARING (SLEEVE) | 83539 | 32 | STL | .0032 | .0320 | | | .0320 | .0448 | .0512 | |
| WELD NUT - M6 | 83540A | 2 | STL | .0240 | .0540 | | | .0540 | .0776 | .0882 | |
| WELD NUT - M8 | 83540B | 4 | STL | .0820 | .1400 | | | .1400 | .2012 | .2284 | |
| COVER - LOWER JACKET | 83540C | 1 | PLY | .0825 | .0528 | .0128 | .0181 | .0837 | .1203 | .1367 | 30.0 |
| ASSEMBLY COST | | | | | .0105 | .1326 | .1068 | .2499 | .3591 | .4079 | 10.0 |

A-25

VEHICLE- 03- CHEVROLET CAVALIER

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | CONSUMER PRICE | TOOLING |
|------------------------------------|----------|-----|------|--------|----------|-------|--------|-------|--------|----------------|---------|
| ASM - STRG. COL. MTG. BRACKET | 83541 | 1 | ASSY | .9811 | .5329 | .1030 | .1425 | .7784 | 1.1187 | 1.2707 | 135.0 |
| BRACKET - STRG. COL. MTG. | 83542 | 1 | HRS | .8517 | .4094 | .0134 | .0316 | .4544 | .6530 | .7418 | 75.0 |
| SPACER NUT - STRG. COL. MTG. BRKT. | 83543 | 2 | ZN | .1286 | .0706 | .0374 | .0758 | .1838 | .2642 | .3002 | 50.0 |
| SPACER NUT LOCK | 83552 | 4 | PLAS | .0008 | .0520 | | | .0520 | .0748 | .0848 | |
| ASSEMBLY COST | | | | | .0009 | .0522 | .0351 | .0882 | .1267 | .1439 | 10.0 |

1983 CHEVROLET CAVALIER BOARD 5

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40 B

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29 28 36 32 40 C



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VEHICLE- 03- CHEVROLET CAVALIER

| DESCRIPTION | ITEM | NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|-----------------------|------|---------|-----|----------|--------|-----------------------------|-------|--------|----------------------------|--------|--------|-------|
| | | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - STEERING SHAFT | | 183601 | 1 | 11ASSY | 2.8108 | 1.7906 | .5030 | .6790 | 2.9726 | 4.2715 | 4.8524 | 82.0 |
| SHAFT - UPPER - STRG. | | 183602 | 1 | 11CRS | 1.7495 | .7697 | .2285 | .4266 | 1.4248 | 2.0474 | 2.3258 | 30.0 |
| SHAFT - LOWER - STRG. | | 183604 | 1 | 11STTB | .9703 | .3108 | .1034 | .1146 | .5288 | .7599 | .8632 | 25.0 |
| BEARING | | 183610 | 1 | 11STL | .0763 | .6000 | | | .6000 | .8622 | .9795 | |
| RETAINER RING | | 183612 | 2 | 21STL | .0044 | .0800 | | | .0800 | .1150 | .1306 | |
| WASHER | | 183612A | 1 | 11STL | .0067 | .0250 | | | .0250 | .0359 | .0408 | |
| PLASTIC RETAINER | | 183616 | 2 | 21PLAS | .0036 | .0020 | | | .0020 | .0028 | .0032 | |
| ASSEMBLY COST | | | | | | .0031 | .1711 | .1378 | .3120 | .4483 | .5093 | 27.0 |

VEHICLE- 03- CHEVROLET CAVALIER

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE CONSUMER TOOLING | | |
|-----------------------------------|----------|-----|----------|--------|-----------------------------|--------|--------|---------|----------------------------|---------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - INTERMEDIATE STEERING SHAFT | 83624 | 1 | ASSY | 2.6467 | 3.1969 | 3.3340 | 4.5387 | 11.0696 | 15.9075 | 18.0712 | 729.5 |
| COUPLING - UPPER SHAFT | 83622 | 1 | FRG | .5040 | .2231 | .3180 | .6131 | 1.1542 | 1.6586 | 1.8842 | 110.0 |
| SHAFT - UPPER | 83623 | 1 | CRS | .6299 | .2693 | .3260 | .4320 | 1.0273 | 1.4762 | 1.6770 | 34.0 |
| TUBE - LOWER SHAFT | 83625 | 1 | STTB | .1303 | .0854 | .0016 | .0036 | .0906 | .1302 | .1479 | 5.0 |
| COUPLING - LOWER SHAFT | 83626 | 1 | FRG | .3929 | .1760 | .3180 | .6131 | 1.1071 | 1.5909 | 1.8073 | 110.0 |
| SEAL - INTER. SHAFT | 83629 | 1 | RUB | .0601 | .0446 | .0502 | .0342 | .1290 | .1854 | .2106 | 35.0 |
| UNIVERSAL BRACKET | 83637 | 1 | FRG | .2215 | .0995 | .1926 | .3685 | .6066 | .9493 | 1.0784 | 95.0 |
| BEARING | 83639 | 8 | VAR | .1032 | 2.0000 | | | 2.0000 | 2.8744 | 3.2656 | |
| UNIVERSAL JOINT - INTER. SHAFT | 83642 | 2 | FRG | .2086 | .1108 | .9146 | 1.3236 | 2.3490 | 3.3756 | 3.8346 | 200.0 |
| COUPLING - INTERMEDIATE | 83647 | 1 | FRG | .3728 | .1653 | .2713 | .4374 | .8740 | 1.2559 | 1.4267 | 88.0 |
| ROLL PIN | 83648 | 1 | HRS | .0234 | .0070 | .0347 | .0325 | .0742 | .1066 | .1211 | 22.5 |
| ASSEMBLY COST | | | | | .0159 | .9070 | .6807 | 1.6036 | 2.3044 | 2.6178 | 30.0 |

A-29

1983 CHEVROLET CAVALIER BOARD 6

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VEHICLE- 04- FORD CROWN VICTORIA

| DESCRIPTION | ITEM NO. | QTY | MTRL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|-----------------------------------|----------|-----|------|---------|-----------------------------|--------|--------|----------------------------|---------|---------|--------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| FORD CROWN VICTORIA | | 1 | | 15.9348 | 12.7642 | 4.5319 | 5.8654 | 23.1615 | 33.2835 | 37.8105 | 1331.0 |
| ASM - SHIFTING TUBE | 183501 | 1 | ASSY | 3.7275 | 2.5558 | .7232 | 1.0924 | 4.3714 | 6.2818 | 7.1361 | 271.0 |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | 1.8773 | 2.0301 | .6383 | .7424 | 3.4108 | 4.2015 | 5.5681 | 104.0 |
| ASM - STEERING COLUMN MOUNT | 183541 | 1 | ASSY | 1.9885 | .8407 | .5456 | .6308 | 2.0171 | 2.8985 | 3.2927 | 182.0 |
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | 4.0054 | 3.4297 | .7761 | 1.0748 | 5.2806 | 7.5885 | 8.6204 | 206.0 |
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | ASSY | 4.3361 | 3.9079 | 1.8487 | 2.3250 | 8.0816 | 11.6132 | 13.1932 | 568.0 |

ASSEMBLY COST

VEHICLE- 04- FORD CROWN VICTORIA

| DESCRIPTION | ITEM NO. | QTY | MTRL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | WHOLESALE PRICE | CONSUMER PRICE | TOOLING |
|--------------------------------|----------|-----|------|--------|----------|-------|--------|--------|-----------------|----------------|---------|
| | | | | | | | | | | | |
| ASM - SHIFTING TUBE | 83501 | 1 | ASSY | 3.7275 | 2.5558 | .7232 | 1.0924 | 4.3714 | 6.2818 | 7.1361 | 271.0 |
| CLIP - SHIFTING TUBE SHAFT | 83503 | 2 | CRS | .0062 | .0042 | .0076 | .0330 | .0448 | .0644 | .0732 | 20.0 |
| MOUNTING BRACKET - SHIFTER | 83504 | 1 | HRS | .4582 | .2371 | .0325 | .0667 | .3363 | .4833 | .5490 | 75.0 |
| SHIFTING TUBE - LOWER | 83505 | 1 | STTB | .7825 | .4993 | .0572 | .0767 | .6332 | .9099 | 1.0336 | 25.0 |
| LEVER - SHIFTING TUBE | 83506 | 1 | HRS | .1506 | .0575 | .0121 | .0346 | .1042 | .1497 | .1701 | 50.0 |
| SHAFT - SHIFTING TUBE | 83514 | 1 | CRS | 2.2368 | .9938 | .4154 | .6482 | 2.0574 | 2.9565 | 3.3586 | 54.0 |
| PLUG - LOWER SHIFTING TUBE | 83515 | 2 | PLAS | .0020 | .0062 | .0638 | .1052 | .1752 | .2518 | .2860 | 10.0 |
| BEARING | 83516 | 1 | STL | .0831 | .7500 | | | .7500 | 1.0778 | 1.2244 | |
| BUSHING - REINF. SHIFTING TUBE | 83517 | 1 | PLY | .0081 | .0052 | .0032 | .0046 | .0130 | .0187 | .0212 | 25.0 |
| ASSEMBLY COST | | | | | .0025 | .1314 | .1234 | .2573 | .3697 | .4200 | 12.0 |

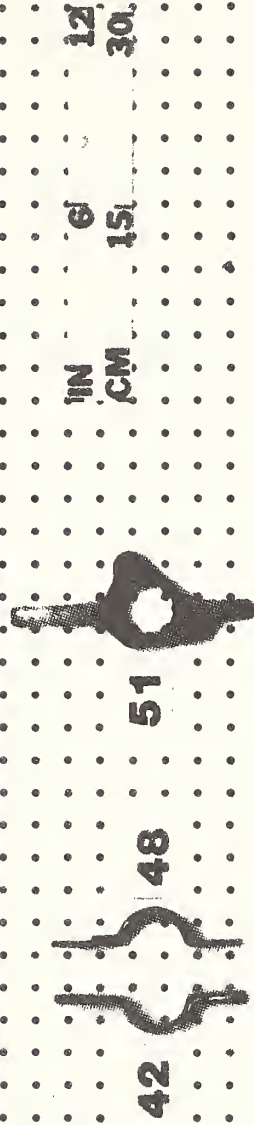
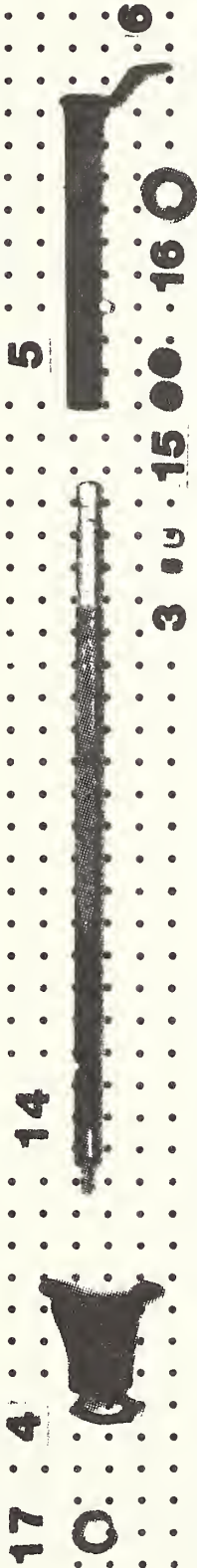
VEHICLE- 04- FORD CROWN VICTORIA

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | WHOLESALE CONSUMER | | | |
|------------------------------|----------|-----|------|--------|-----------------------------|-------|-------|--------------------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | | PRICE | PRICE | | |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | 1.8773 | 2.0301 | .6383 | .7424 | 3.4108 | 4.9015 | 5.5681 | 104.0 |
| JACKET HOUSING - STRG. COL. | 183522 | 1 | HRS | 1.7991 | 1.2472 | .3281 | .3928 | 1.9681 | 2.8282 | 3.2128 | 37.0 |
| RETAINER - JACKET | 183526 | 1 | STWR | .0037 | .0096 | .0013 | .0023 | .0132 | .0190 | .0216 | 10.0 |
| SEAL - BEARING - JACKET | 183531 | 1 | RUB | .0044 | .0175 | .0349 | .0414 | .0938 | .1348 | .1531 | 40.0 |
| BEARING | 183532 | 1 | STL | .0701 | .7500 | | | .7500 | 1.0778 | 1.2244 | |
| ASSEMBLY COST | | | | | .0058 | .2740 | .3059 | .5857 | .8417 | .9562 | 17.0 |

VEHICLE- 04- FORD CROWN VICTORIA

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | MANUFACTURING COST | TOTAL | WHOLESALE PRICE | CONSUMER PRICE | TOOLING |
|-----------------------------|----------|-----|------|--------|----------|-------|--------|--------------------|--------|-----------------|----------------|---------|
| ASM - STEERING COLUMN MOUNT | 83541 | 1 | ASSY | 1.9885 | .8407 | .5456 | .6308 | 2.0171 | 2.8985 | 3.2927 | 182.0 | |
| MOUNTING BRACKET - TOP | 83542 | 1 | HRS | .2719 | .0865 | .0102 | .0217 | .1184 | .1701 | .1932 | 20.0 | |
| RUBBER CUSHION - ISOLATOR | 83547 | 2 | RUB | .0278 | .0310 | .0438 | .0376 | .1024 | .1472 | .1672 | 35.0 | |
| MOUNTING BRACKET - BOTTOM | 83548 | 1 | HRS | .1646 | .0586 | .0102 | .0217 | .0905 | .1300 | .1477 | 20.0 | |
| NYLON BUSHING | 83549 | 2 | NY | .0246 | .0486 | .0336 | .0434 | .1256 | .1804 | .2050 | 32.0 | |
| MOUNTING BRACKET | 83551 | 1 | PM | 1.4996 | .6097 | .2161 | .3220 | 1.1478 | 1.6494 | 1.9737 | 51.0 | |
| ASSEMBLY COST | | | | | .0163 | .2317 | .1844 | .4324 | .6214 | .7059 | 24.0 | |

1983 FORD CROWN VICTORIA BOARD 5



IN 6 12
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VEHICLE- 04- FORD CROWN VICTORIA

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE/ CONSUMER/ TOOLING | | | |
|-------------------------|----------|-----|----------|--------|-----------------------------|-------|--------|------------------------------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - STEERING SHAFT | 83601 | 1 | ASSY | 4.0054 | 3.4297 | .7761 | 1.0748 | 5.2806 | 7.5885 | 8.6204 | 206.0 |
| SHAFT - UPPER - STRG. | 83602 | 1 | CRS | 2.2327 | .9560 | .1972 | .3994 | 1.5526 | 2.2311 | 2.5345 | 25.0 |
| SHAFT - LOWER - STRG. | 83604 | 1 | STTB | 1.5256 | .9410 | .1662 | .2224 | 1.3296 | 1.9106 | 2.1704 | 27.0 |
| CLIP - STRG. SHAFT | 83606 | 2 | CRS | .0044 | .0042 | .0102 | .0330 | .0474 | .0682 | .0774 | 20.0 |
| COLLAR - SHAFT LOWER | 83608 | 1 | PM | .1065 | .0442 | .0436 | .0844 | .1722 | .2475 | .2812 | 40.0 |
| SPACER - STRG. SHAFT | 83609 | 1 | NY | .0097 | .0116 | .0319 | .0387 | .0822 | .1181 | .1342 | 25.0 |
| BEARING | 83610 | 1 | STL | .0291 | .5500 | | | .5500 | .7904 | .8979 | |
| SEAL - STRG. SHAFT | 83611 | 1 | RUB | .0059 | .0230 | .0349 | .0414 | .0993 | .1427 | .1621 | 40.0 |
| RETAINER RING | 83612 | 1 | STL | .0022 | .0400 | | | .0400 | .0575 | .0653 | |
| BEARING - LOWER SHAFT | 83617 | 1 | STL | .0873 | .8500 | | | .8500 | 1.2215 | 1.3876 | |
| PLUG - LWR. STRG. SHAFT | 83619 | 1 | PLAS | .0020 | .0051 | .0319 | .0526 | .0896 | .1288 | .1463 | 10.0 |
| ASSEMBLY COST | | | | | .0046 | .2602 | .2029 | .4677 | .6721 | .7635 | 19.0 |

A-26

VEHICLE- 04- FORD CROWN VICTORIA

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | WHOLESALE CONSUMER TOOLING | | | | |
|------------------------------------|----------|-----|----------|--------|-----------------------------|--------|----------------------------|--------|---------|---------|-------|
| | | | | | LABOR | BURDEN | PRICE | PRICE | | | |
| ASM - INTERMEDIATE STEERING SHAFT | 83621 | 1 | ASSY | 4.3361 | 3.9079 | 1.8487 | 2.3250 | 8.0816 | 11.6132 | 13.1932 | 568.0 |
| SHAFT - UPPER | 83623 | 1 | CRS | .2940 | .1831 | .2465 | .3684 | .7980 | 1.1467 | 1.3027 | 60.0 |
| SPRING - INNER SHAFT RETAINER | 83624 | 1 | SSTL | .0256 | .0256 | .0048 | .0129 | .0433 | .0622 | .0707 | 15.0 |
| SHAFT - LOWER (INNER) | 83625 | 1 | CRS | .8074 | .5277 | .2770 | .3460 | 1.1507 | 1.6536 | 1.8785 | 60.0 |
| FLANGE - FLEX COUPLING | 83626 | 1 | HRS | .3116 | .2562 | .0170 | .0502 | .3234 | .4647 | .5279 | 20.0 |
| SEAL - INTER. SHAFT | 83629 | 1 | RUB | .0191 | .0984 | | | .0984 | .1414 | .1606 | 35.0 |
| FULL PIN - UNIVERSAL ATTACHING | 83632 | 1 | CRS | .0394 | .0162 | .0057 | .0201 | .0420 | .0604 | .0686 | 15.0 |
| UNIVERSAL BRACKET | 83637 | 2 | HRS | .6440 | .2892 | .0904 | .1730 | .5526 | .7940 | .9020 | 35.0 |
| HALF PIN - UNIVERSAL COUPLING | 83638 | 2 | CRS | .0136 | .0058 | .0096 | .0328 | .0482 | .0692 | .0786 | 15.0 |
| BEARING | 83639 | 4 | VAR | .0360 | 1.0000 | | | 1.0000 | 1.4372 | 1.6328 | |
| BEARING COVER | 83640 | 4 | CRS | .0088 | .0816 | | | .0816 | .1172 | .1332 | 5.0 |
| BEARING SPACER | 83641 | 1 | PLAS | .0004 | .0185 | | | .0185 | .0266 | .0302 | 32.0 |
| U-JOINT - RETAINER BLOCK | 83642 | 1 | IPM | .0853 | .0340 | .0437 | .0863 | .1640 | .2357 | .2678 | 36.0 |
| LOWER TUBE - OUTER | 83643 | 1 | STTB | .8974 | .4234 | .0538 | .0512 | .5284 | .7593 | .8626 | 15.0 |
| BOLT - SHAFT TO COLUMN | 83644 | 1 | CRS | .0746 | .0730 | | | .0730 | .1049 | .1192 | |
| NUT - SHAFT TO COLUMN | 83645 | 1 | CRS | .0399 | .0500 | | | .0500 | .0719 | .0817 | |
| FLEX PLATE - COUPLING (RAG) LWR. | 83649 | 1 | RFBF | .0860 | .0975 | .0407 | .0479 | .1861 | .2674 | .3038 | 10.0 |
| PLATE - FLEX PLATE TO FLO (BOTTOM) | 83650 | 2 | CRS | .0360 | .0176 | .0238 | .0488 | .0902 | .1296 | .1472 | 13.0 |
| PLATE - FLEX PLATE TO FLANGE | 83650A | 1 | HRS | .1850 | .1894 | .0119 | .0361 | .2374 | .3411 | .3875 | 20.0 |
| BOLT - FLANGE TO SHAFT LWR. CFLG. | 83651 | 1 | CRS | .0370 | .0450 | | | .0450 | .0647 | .0735 | |
| PIN - FLEX PLATE | 83652 | 2 | CRS | .1000 | .0500 | | | .0500 | .0718 | .0816 | |
| BOLT - FLEX PLATE TO FLANGE | 83653 | 2 | CRS | .2060 | .1500 | | | .1500 | .2156 | .2450 | |
| ADAPTOR - FLEX PLATE TO SHAFT | 83654 | 1 | HRS | .3610 | .1967 | .2293 | .3467 | .7727 | 1.1104 | 1.2614 | 112.0 |
| NUT | 83655 | 2 | CRS | .0280 | .0620 | | | .0620 | .0890 | .1012 | |
| ASSEMBLY COST | | | | | .0170 | .7945 | .7046 | 1.5161 | 2.1786 | 2.4749 | 70.0 |

1983 FORD CROWN VICTORIA BOARD 6



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IN 6' 12"
CM 15 30

VEHICLE- 05- FORD LTD

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|-----------------------------------|----------|-----|----------|---------|-----------------------------|--------|--------|----------------------------|---------|---------|--------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| FORD LTD | | | | 14.2683 | 9.8390 | 4.2331 | 5.5945 | 19.6686 | 28.2642 | 32.1085 | 1154.0 |
| ASM - SHIFTING TUBE | 183501 | 1 | ASSY | 3.4873 | 1.5224 | .8379 | 1.1402 | 3.5005 | 5.0303 | 5.7143 | 194.0 |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | 1.7272 | 1.9203 | .6409 | .7509 | 3.3121 | 4.7596 | 5.4069 | 114.0 |
| ASM - STEERING COLUMN MOUNT | 183541 | 1 | ASSY | 1.9885 | .8407 | .5456 | .6308 | 2.0171 | 2.8985 | 3.2927 | 182.0 |
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | 3.8617 | 2.5803 | .7761 | 1.0748 | 4.4312 | 6.3679 | 7.2338 | 206.0 |
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | ASSY | 3.2036 | 2.9753 | 1.4326 | 1.9998 | 6.4077 | 9.2079 | 10.4608 | 458.0 |
| ASSEMBLY COST | | | | | | | | | | | |

VEHICLE- 05- FORD LTD

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE CONSUMER | | |
|-------------------------------|----------|-----|----------|--------|-----------------------------|--------|--------|--------|--------------------|--------|-------|
| | | | | | LABOR | BURDEN | PRICE | PRICE | PRICE | PRICE | |
| ASM - SHIFTING TUBE | 183501 | 1 | ASSY | 3.4873 | 1.5224 | .8379 | 1.1402 | 3.5005 | 5.0303 | 5.7143 | 194.0 |
| CLIP | 183503 | 2 | STL | .0066 | .0400 | | | .0400 | .0574 | .0652 | |
| MOUNTING BRACKET - SHIFTER | 183504 | 1 | HRS | .4425 | .2073 | .0677 | .0977 | .3727 | .5356 | .6084 | 50.0 |
| SHIFTING TUBE - LOWER | 183505 | 1 | HRS | .7432 | .2134 | .0916 | .0908 | .3958 | .5688 | .6462 | 10.0 |
| LEVER - TRANSMISSION LINKAGE* | 183506 | 1 | HRS | .0480 | .0415 | .0133 | .0272 | .0820 | .1178 | .1338 | 20.0 |
| SHAFT - SHIFTING TUBE | 183514 | 1 | CRS | 2.2368 | .9938 | .4154 | .6482 | 2.0574 | 2.9565 | 3.3586 | 54.0 |
| PLUG - FOAM | 183515 | 2 | PLAS | .0020 | .0062 | .0638 | .1052 | .1752 | .2518 | .2860 | 10.0 |
| BUSHING - SHIFTING MOUNT | 183517 | 1 | PLY | .0082 | .0057 | .0096 | .0130 | .0283 | .0407 | .0462 | 30.0 |
| ASSEMBLY COST | | | | | .0145 | .1765 | .1581 | .3491 | .5017 | .5699 | 20.0 |

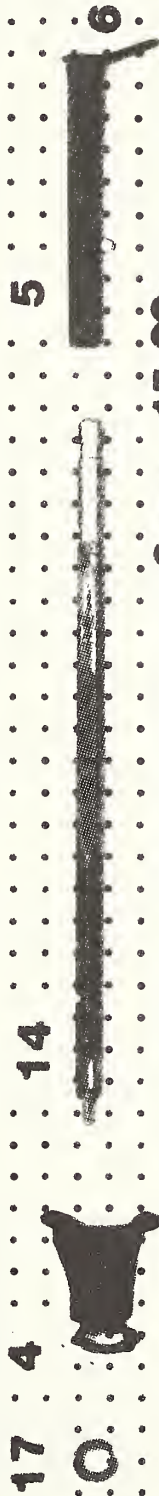
VEHICLE- 05- FORD LTD

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|------------------------------|----------|-----|------|--------|-----------------------------|-------|--------|----------------------------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | 1.7272 | 1.9203 | .6409 | .7509 | 3.3121 | 4.7596 | 5.4069 | 114.0 |
| JACKET HOUSING - STRG. COL. | 183522 | 1 | HRS | 1.6544 | 1.1427 | .3281 | .3928 | 1.8636 | 2.6780 | 3.0422 | 37.0 |
| RETAINER - BEARING - JACKET | 183526 | 1 | CRS | .0023 | .0043 | .0039 | .0108 | .0190 | .0273 | .0310 | 20.0 |
| SEAL - BEARING - JACKET | 183531 | 1 | RUB | .0041 | .0175 | .0349 | .0414 | .0938 | .1348 | .1531 | 40.0 |
| BEARING | 183532 | 1 | STL | .0664 | .7500 | | | .7500 | 1.0778 | 1.2244 | |
| ASSEMBLY COST | | | | | .0058 | .2740 | .3059 | .5857 | .8417 | .9562 | 17.0 |

VEHICLE- 05- FORD LTD

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE CONSUMER LOADING | | |
|-----------------------------|----------|-----|------|--------|-----------------------------|-------|--------|--------|----------------------------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | PRICE | PRICE | PRICE | |
| ASM - STEERING COLUMN MOUNT | 183541 | 1 | ASSY | 1.9885 | .8407 | .5456 | .6308 | 2.0171 | 2.8985 | 3.2927 | 182.0 |
| MOUNTING BRACKET - TOP | 183542 | 1 | HRS | .2719 | .0865 | .0102 | .0217 | .1184 | .1701 | .1932 | 20.0 |
| RUBBER CUSHION - ISOLATOR | 183547 | 1 | RUB | .0278 | .0210 | .0438 | .0376 | .1024 | .1472 | .1672 | 35.0 |
| MOUNTING BRACKET - BOTTOM | 183548 | 1 | HRS | .1646 | .0586 | .0102 | .0217 | .0905 | .1300 | .1477 | 20.0 |
| NYLON RUSHING | 183549 | 2 | NY | .0246 | .0486 | .0336 | .0434 | .1256 | .1804 | .2050 | 32.0 |
| MOUNTING BRACKET | 183551 | 1 | PM | 1.4996 | .6097 | .2161 | .3220 | 1.1478 | 1.6494 | 1.8371 | 51.0 |
| ASSEMBLY COST | | | | | .0163 | .2317 | .1844 | .4324 | .6214 | .7059 | 24.0 |

1983 FORD L.T.D. BOARD 5



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VEHICLE- 05- FORD LTD

| DESCRIPTION | ITEM NO. | QTY | MATL WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | WHOLESALE PRICE | CONSUMER PRICE | TOOLING |
|-------------------------|----------|-----|-------------|----------|--------|--------|--------|--------|-----------------|----------------|---------|
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | 3.8617 | 2.5803 | .7761 | 1.0748 | 4.4312 | 6.3679 | 7.2338 | 206.0 |
| SHAFT - UPPER - STRG. | 183602 | 1 | CRS | 2.2301 | .9560 | .1972 | .3994 | 1.5526 | 2.2311 | 2.5345 | 25.0 |
| SHAFT - LOWER - STRG. | 183604 | 1 | STL | 1.4658 | .9410 | .1662 | .2224 | 1.3296 | 1.9106 | 2.1704 | 27.0 |
| CLIP - STRG. SHAFT | 183606 | 2 | CRS | .0062 | .0042 | .0102 | .0330 | .0474 | .0682 | .0774 | 20.0 |
| COLLAR - SHAFT LOWER | 183608 | 1 | PH | .1065 | .0442 | .0436 | .0844 | .1722 | .2475 | .2812 | 40.0 |
| SPACER - STRG. SHAFT | 183609 | 1 | NY | .0102 | .0122 | .0319 | .0387 | .0828 | .1190 | .1352 | 25.0 |
| BEARING | 183610 | 1 | STL | .0321 | .5500 | | | .5500 | .7904 | .8979 | |
| SEAL - STRG. SHAFT | 183611 | 1 | RUB | .0056 | .0230 | .0349 | .0414 | .0993 | .1427 | .1621 | 40.0 |
| RETAINER RING | 183612 | 1 | STL | .0022 | .0400 | | | .0400 | .0575 | .0653 | |
| PLUG - LWR. STRG. SHAFT | 183619 | 1 | PLAS | .0020 | .0051 | .0319 | .0526 | .0896 | .1288 | .1463 | 10.0 |
| ASSEMBLY COST | | | | | .0046 | .2602 | .2029 | .4677 | .6721 | .7635 | 19.0 |

VEHICLE - 05 - FORD LTD

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE CONSUMER PRICING | | |
|------------------------------------|----------|-----|----------|--------|-----------------------------|--------|--------|--------|----------------------------|---------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | |
| ASM - INTERMEDIATE STEERING SHAFT | 83621 | 1 | ASSY | 3.2036 | 2.9753 | 1.4326 | 1.9998 | 6.4077 | 9.2079 | 10.4608 | 458.0 |
| SHAFT - UPPER | 83623 | 1 | CRS | .2940 | .1831 | .2465 | .3684 | .7980 | 1.1467 | 1.3027 | 60.0 |
| SHAFT - LOWER | 83625 | 1 | CRS | .7636 | .3453 | .0880 | .2307 | .6440 | .9542 | 1.0840 | 20.0 |
| FLANGE - LOWER COUPLING | 83626 | 1 | HRS | .1650 | .0586 | .0136 | .0535 | .1257 | .1806 | .2052 | 25.0 |
| FULL PIN - UNIVERSAL ATTACHING | 83632 | 1 | CRS | .0394 | .0162 | .0057 | .0201 | .0420 | .0604 | .0686 | 15.0 |
| UNIVERSAL BRACKET | 83637 | 2 | HRS | .6440 | .2892 | .0904 | .1730 | .5526 | .7940 | 9020 | 35.0 |
| HALF PIN - UNIVERSAL COUPLING | 83638 | 2 | CRS | .0136 | .0058 | .0096 | .0328 | .0482 | .0692 | .0786 | 15.0 |
| BEARING | 83639 | 4 | VAR | .0360 | 1.0000 | | | 1.0000 | 1.4372 | 1.6328 | |
| BEARING COVER | 83640 | 4 | CRS | .0088 | .0816 | | | .0816 | .1172 | .1332 | 5.0 |
| BEARING SPACER | 83641 | 1 | FLAS | .0004 | .0185 | | | .0185 | .0266 | .0302 | 32.0 |
| U-JOINT - RETAINER BLOCK | 83642 | 1 | PM | .0853 | .0340 | .0437 | .0863 | .1640 | .2357 | .2678 | 36.0 |
| BOLT - SHAFT TO COLUMN | 83644 | 1 | CRS | .0746 | .0730 | | | .0730 | .1049 | 1.192 | |
| NUT - SHAFT TO COLUMN BOLT | 83645 | 1 | CRS | .0399 | .0500 | | | .0500 | .0719 | .0817 | |
| FLEX PLATE - COUPLING (RAG) LWR. | 83649 | 1 | RFB | .0860 | .0975 | .0407 | .0479 | .1861 | .2674 | .3038 | 10.0 |
| PLATE - FLEX PLATE TO FLG (BOTTOM) | 83650 | 2 | CRS | .0360 | .0176 | .0238 | .0488 | .0902 | .1296 | 1.472 | 13.0 |
| PLATE - FLEX PLATE TO FLANGE | 83650A | 1 | HRS | .1850 | .1894 | .0119 | .0361 | .2374 | .3411 | .3875 | 20.0 |
| BOLT - FLANGE TO SHAFT LWR. CPLG. | 83651 | 1 | CRS | .0370 | .0450 | | | .0450 | .0647 | .0735 | |
| PIN - FLEX PLATE | 83652 | 2 | CRS | .1000 | .0500 | | | .0500 | .0718 | .0816 | |
| BOLT - FLEX PLATE TO FLANGE | 83653 | 2 | CRS | .2060 | .1500 | | | .1500 | .2156 | .2450 | |
| ADAPTOR - FLEX PLATE TO SHAFT | 83654 | 1 | HRS | .3610 | .1967 | .2293 | .3467 | .7727 | 1.1104 | 1.2614 | 112.0 |
| NUT | 83655 | 2 | CRS | .0280 | .0620 | | | .0620 | .0890 | 1.012 | |
| ASSEMBLY COST | | | | | .0118 | .6294 | .5555 | 1.1967 | 1.7197 | 1.9536 | 60.0 |

1983 FORD L.T.D. BOARD 6



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- 42 38 32 39 41 37 25
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- 55 50 A 53 49 50 54 51



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CM 15 30

VEHICLE- 06- FORD MUSTANG

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | CONSUMER PRICE | TOOLING |
|-----------------------------------|----------|-----|------|---------|----------|--------|--------|---------|---------|----------------|---------|
| FORD MUSTANG | | 1 | | 10.4744 | 7.7522 | 3.1311 | 4.0390 | 14.9223 | 21.4435 | 24.3603 | 923.0 |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | 1.7294 | 1.9206 | .4716 | .5117 | 2.9039 | 4.1729 | 4.7404 | 89.0 |
| ASM - STEERING COLUMN MOUNT | 183541 | 1 | ASSY | 1.9885 | .8407 | .5456 | .6308 | 2.0171 | 2.8985 | 3.2927 | 182.0 |
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | 3.5529 | 2.0156 | .6813 | .8957 | 3.5936 | 5.1642 | 5.8664 | 194.0 |
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | ASSY | 3.2036 | 2.9753 | 1.4326 | 1.9998 | 6.4071 | 9.2079 | 10.4608 | 458.0 |
| ASSEMBLY COST | | | | | | | | | | | |

VEHICLE- 06- FORD MUSTANG

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | | TOTAL | | | WHOLESALE CONSUMER TOOLING | | |
|------------------------------|----------|-----|----------|--------|-----------------------------|--------|--------|--------|--------|-------|----------------------------|--------|-------|
| | | | | | LABOR | BURDEN | FRICE | LABOR | BURDEN | FRICE | LABOR | BURDEN | FRICE |
| ASM - STEERING COLUMN JACKET | 83521 | 1 | ASSY | 1.7294 | .4716 | .5117 | 2.9039 | 4.1729 | 4.7404 | 89.0 | | | |
| JACKET HOUSING - STRG. COL. | 83522 | 1 | HRS | 1.6544 | .3281 | .3928 | 1.8636 | 2.6780 | 3.0422 | 37.0 | | | |
| RETAINER - JACKET | 83526 | 1 | STWR | .0037 | .0013 | .0023 | .0130 | .0187 | .0212 | 10.0 | | | |
| SEAL - BEARING - JACKET | 83531 | 1 | RUB | .0044 | .0349 | .0414 | .0930 | .1336 | .1518 | 40.0 | | | |
| BEARING | 83532 | 1 | STL | .0669 | .7500 | | .7500 | 1.0778 | 1.2244 | | | | |
| ASSEMBLY COST | | | | | .1073 | .0752 | .1843 | .2648 | .3008 | 2.0 | | | |

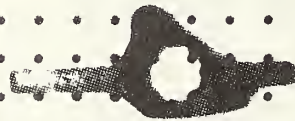
VEHICLE- 06- FORD MUSTANG

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | TOTAL | WHOLESALE PRICE | CONSUMER PRICE | TOOLING |
|-----------------------------|----------|-----|----------|--------|-----------------------------|-------|-----------------|----------------|---------|
| | | | | | | | | | |
| ASM - STEERING COLUMN MOUNT | 183541 | 1 | 1.9885 | .8407 | .5456 | .6308 | 2.8985 | 3.2927 | 182.0 |
| MOUNTING BRACKET - TOP | 183542 | 1 | .2719 | .0865 | .0102 | .0217 | .1701 | .1932 | 20.0 |
| RUBBER CUSHION - ISOLATOR | 183547 | 2 | .0278 | .0210 | .0438 | .0376 | .1472 | .1672 | 35.0 |
| MOUNTING BRACKET - BOTTOM | 183548 | 1 | .1646 | .0586 | .0102 | .0217 | .1300 | .1477 | 20.0 |
| NYLON BUSHING | 183549 | 2 | .0246 | .0486 | .0336 | .0434 | .1804 | .2050 | 32.0 |
| MOUNTING BRACKET | 183551 | 1 | 1.4996 | .6097 | .2161 | .3220 | 1.6494 | 1.8737 | 51.0 |
| ASSEMBLY COST | | | | .0163 | .2317 | .1844 | .6214 | .7059 | 24.0 |

1983 FORD MUSTANG BOARD 5

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VEHICLE- 06- FORD MUSTANG

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | CONSUMER | LOADING |
|-----------------------|----------|-----|------|--------|----------|-------|--------|--------|--------|--------|----------|---------|
| | | | | | | | | | | | | |
| ASM - STEERING SHAFT | 83601 | 1 | ASSY | 3.5529 | 2.0156 | .6813 | .8967 | 3.5936 | 5.1642 | 5.8664 | 194.0 | |
| SHAFT - UPPER - STRG. | 83602 | 1 | CRS | 2.0103 | .8756 | .1972 | .3994 | 1.4722 | 2.1156 | 2.4033 | 25.0 | |
| SHAFT - LOWER - STRG. | 83604 | 1 | HRS | 1.3843 | .4718 | .1094 | .1009 | .6821 | .9802 | 1.1135 | 25.0 | |
| CLIP - STRG. SHAFT | 83606 | 2 | CRS | .0064 | .0042 | .0102 | .0330 | .0474 | .0682 | .0774 | 20.0 | |
| COLLAR - SHAFT LOWER | 83608 | 1 | PM | .1031 | .0409 | .0436 | .0844 | .1689 | .2427 | .2757 | 40.0 | |
| SPADER - STRG. SHAFT | 83609 | 1 | NY | .0104 | .0119 | .0319 | .0387 | .0825 | .1186 | .1347 | 25.0 | |
| BEARING | 83610 | 1 | STL | .0318 | .5500 | | | .5500 | .7904 | .8979 | | |
| SEAL - STRG. SHAFT | 83611 | 1 | RUB | .0044 | .0167 | .0349 | .0414 | .0930 | .1336 | .1518 | 40.0 | |
| RETAINER RING | 83612 | 1 | STL | .0022 | .0400 | | | .0400 | .0575 | .0653 | | |
| ASSEMBLY COST | | | | | .0045 | .2541 | .1989 | .4575 | .6574 | .7468 | 19.0 | |

VEHICLE- 06- FORD MUSTANG

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | WHOLESALE - CONSUMER | | | |
|------------------------------------|----------|-----|----------|--------|-----------------------------|--------|--------|----------------------|--------|---------|-------|
| | | | | | LABOR | BURDEN | | PRICE | PRICE | | |
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | ASSY | 3.2036 | 2.9753 | 1.4326 | 1.9998 | 6.4077 | 9.2079 | 10.4608 | 458.0 |
| SHAFT - UPPER | 183623 | 1 | CRS | .2940 | .1831 | .2465 | .3684 | .7980 | 1.1467 | 1.3027 | 60.0 |
| SHAFT - LOWER | 183625 | 1 | CRS | .7636 | .3453 | .0880 | .2307 | .6640 | .9542 | 1.0840 | 20.0 |
| FLANGE - LOWER COUPLING | 183626 | 1 | HRS | .1650 | .0586 | .0136 | .0535 | .1257 | .1806 | .2052 | 25.0 |
| FULL PIN - UNIVERSAL ATTACHING | 183632 | 1 | CRS | .0394 | .0162 | .0057 | .0201 | .0420 | .0604 | .0686 | 15.0 |
| UNIVERSAL BRACKET | 183637 | 2 | HRS | .6440 | .2892 | .0904 | .1730 | .5526 | .7940 | .9020 | 35.0 |
| HALF PIN - UNIVERSAL COUPLING | 183638 | 2 | CRS | .0136 | .0058 | .0096 | .0328 | .0482 | .0692 | .0786 | 15.0 |
| BEARING | 183639 | 4 | VAR | .0360 | 1.0000 | | | 1.0000 | 1.4372 | 1.6328 | |
| BEARING COVER | 183640 | 4 | CRS | .0088 | .0816 | | | .0816 | .1172 | .1332 | 5.0 |
| BEARING SPACER | 183641 | 1 | PLAS | .0004 | .0185 | | | .0185 | .0266 | .0302 | 32.0 |
| U-JOINT - RETAINER BLOCK | 183642 | 1 | PM | .0853 | .0340 | .0437 | .0863 | .1640 | .2357 | .2678 | 36.0 |
| BOLT - SHAFT TO COLUMN | 183644 | 1 | CRS | .0746 | .0730 | | | .0730 | .1049 | .1192 | |
| NUT - SHAFT TO COLUMN | 183645 | 1 | CRS | .0399 | .0500 | | | .0500 | .0719 | .0817 | |
| FLEX PLATE - COUPLING (RAG) LWR. | 183649 | 1 | RFB | .0860 | .0975 | .0407 | .0479 | .1861 | .2674 | .3038 | 10.0 |
| PLATE - FLEX PLATE TO FLG (BOTTOM) | 183650 | 2 | CRS | .0360 | .0176 | .0238 | .0488 | .0902 | .1296 | .1472 | 13.0 |
| PLATE - FLEX PLATE TO FLANGE | 183650A | 1 | HRS | .1850 | .1894 | .0119 | .0361 | .2374 | .3411 | .3875 | 20.0 |
| BOLT - FLANGE TO SHAFT LWR. CPLG. | 183651 | 1 | CRS | .0370 | .0450 | | | .0450 | .0647 | .0735 | |
| PIN - FLEX PLATE | 183652 | 2 | CRS | .1000 | .0500 | | | .0500 | .0718 | .0816 | |
| BOLT - FLEX PLATE TO FLANGE | 183653 | 2 | CRS | .2060 | .1500 | | | .1500 | .2156 | .2450 | |
| ADAPTOR - FLEX PLATE TO SHAFT | 183654 | 1 | HRS | .3610 | .1967 | .2293 | .3467 | .7727 | 1.1104 | 1.2614 | 112.0 |
| NUT | 183655 | 2 | CRS | .0280 | .0620 | | | .0620 | .0890 | .1012 | |
| ASSEMBLY COST | | | | | .0118 | .6294 | .5555 | 1.1967 | 1.7197 | 1.9536 | 60.0 |

1983 FORD MUSTANG BOARD 6



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- 42 38 32 39 41 37 25 26
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VEHICLE- 07- CHRYSLER FIFTH AVENUE

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | WHOLESALE CONSUMER TOOLING | | | | | |
|------------------------------------|----------|-----|----------|--------|-----------------------------|----------------------------|---------|---------|---------|---------|-------|
| | | | | | | TOTAL | PRICE | | | | |
| CHRYSLER FIFTH AVENUE | | 11 | 10.2939 | 9.9268 | 3.5063 | 5.0228 | 18.4559 | 26.5214 | 30.1288 | 1269.5 | |
| ASM - SHIFTING TUBE | 183501 | 1 | ASSY | 1.0880 | .7789 | .5450 | .6114 | 1.9353 | 2.7810 | 3.1592 | 180.5 |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | 1.7867 | .7691 | .4602 | .6978 | 1.9271 | 2.7693 | 3.1461 | 245.0 |
| ASM - STEERING COLUMN MTG. BRACKET | 183541 | 1 | ASSY | 2.0015 | 1.1844 | .1183 | .1909 | 1.4936 | 2.1464 | 2.4382 | 185.0 |
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | 3.1175 | 4.2905 | .6776 | 1.0028 | 5.9709 | 8.5803 | 9.7475 | 193.0 |
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | ASSY | 2.3002 | 2.9039 | 1.7052 | 2.5199 | 7.1290 | 10.2444 | 11.6378 | 466.0 |
| ASSEMBLY COST | | | | | | | | | | | |

VEHICLE- 07- CHRYSLER EARTH AVENUE

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | WHOLESALE CONSUMER PRICING | | | | |
|---------------------------|----------|-----|----------|--------|-----------------------------|-------|----------------------------|--------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | |
| ASM - SHIFTING TUBE | 183501 | 1 | 1:ASSY | 1.0880 | .7789 | .5450 | .6114 | 1.9353 | 2.7810 | 3.1592 | 180.5 |
| SHIFTING TUBE - UPPER | 183502 | 1 | 1:STTB | .5660 | .3582 | .1631 | .1958 | .7171 | 1.0305 | 1.1706 | 34.5 |
| CLIP | 183503 | 2 | 1:NY | .0028 | .0020 | | | .0020 | .0028 | .0032 | |
| SHIFTING TUBE - LOWER | 183505 | 1 | 1:STTB | .4200 | .2646 | .1462 | .1766 | .5874 | .8441 | .9589 | 37.0 |
| LEVER - SHIFTING TUBE | 183506 | 1 | 1:CRS | .0579 | .0986 | .0121 | .0346 | .1453 | .2088 | .2372 | 50.0 |
| PAD - UPPER SHIFTING TUBE | 183507 | 1 | 1:CRS | .0146 | .0058 | .0029 | .0076 | .0163 | .0234 | .0266 | 15.0 |
| COLLAR - SHIFTING TUBE | 183510 | 1 | 1:PLYF | .0057 | .0131 | .0638 | .0526 | .1295 | .1861 | .2114 | 10.0 |
| SLEEVE - SHIFTING TUBE | 183512 | 1 | 1:PLAS | .0210 | .0337 | .0064 | .0068 | .0469 | .0674 | .0766 | 15.0 |
| ASSEMBLY COST | | | | | .0029 | .1505 | .1374 | .2908 | .4179 | .4747 | 19.0 |

VEHICLE- 07- CHRYSLER FIFTH AVENUE

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER PRICING | | | |
|---------------------------------|----------|-----|----------|--------|-----------------------------|-------|--------|----------------------------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | 1.7867 | .7691 | .4602 | .6978 | 1.9271 | 2.7693 | 3.1461 | 245.0 |
| JACKET - HOUSING - STRG. COL. | 183522 | 1 | CRS | 1.0959 | .5299 | .0827 | .2039 | .8165 | 1.1733 | 1.3329 | 130.0 |
| SLEEVE - STRG. COL. JACKET HSG. | 183533 | 1 | HRS | .6890 | .1878 | .0902 | .1721 | .4501 | .6468 | .7348 | 65.0 |
| RIVET | 183534 | 3 | STL | .0018 | .0150 | | | .0150 | .0216 | .0246 | |
| ASSEMBLY COST | | | | | .0364 | .2873 | .3218 | .6455 | .9276 | 1.0538 | 50.0 |

VEHICLE- 07- CHRYSLER FIFTH AVENUE

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE CONSUMER PRICE | | |
|------------------------------------|----------|-----|----------|--------|-----------------------------|--------|-------|--------|--------------------------|--------|-------|
| | | | | | LABOR | BURDEN | PRICE | PRICE | | | |
| ASM - STEERING COLUMN MTG. BRACKET | 183541 | 1 | ASSY | 2.0015 | 1.1844 | .1193 | .1909 | 1.4936 | 2.1464 | 2.4392 | 185.0 |
| MTG. BRACKET - STRG. COL. | 183542 | 1 | HRS | 1.0679 | .3749 | .0041 | .0131 | .3921 | .5634 | .6400 | 50.0 |
| SPACER - STRG. COL. BRKT. | 183543 | 2 | FLYP | .0348 | .0196 | .0192 | .0260 | .0648 | .0932 | .1058 | 30.0 |
| LOWER MTG. BRACKET - STRG. COL. | 183551 | 1 | HRS | .8988 | .7892 | .0550 | .1260 | .9702 | 1.3942 | 1.5838 | 100.0 |
| ASSEMBLY COST | | | | | .0007 | .0400 | .0258 | .0665 | .0956 | .1086 | 5.0 |

1983 CHRYSLER 5th AVE. BOARD 5

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10 O

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VEHICLE - 07 - CHRYSLER FIFTH AVENUE

| DESCRIPTION | ITEM NO. | QTY | MTRL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER PRICING | | | |
|---------------------------------|----------|-----|------|--------|-----------------------------|-------|--------|----------------------------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | 3.1175 | 4.2905 | .6776 | 1.0028 | 5.9709 | 8.5803 | 9.7475 | 193.0 |
| SHAFT - UPPER STEERING | 183602 | 1 | CRS | 1.5359 | .6462 | .1950 | .3481 | 1.1893 | 1.7090 | 1.9414 | 19.0 |
| SHAFT - LOWER STEERING | 183604 | 1 | STTB | 1.0263 | .3276 | .0566 | .0539 | .4381 | .6295 | .7151 | 5.0 |
| PIN | 183605 | 1 | STL | .0139 | .0050 | | | .0050 | .0072 | .0082 | |
| BEARING | 183610 | 1 | STL | .0313 | .5500 | | | .5500 | .7904 | .8979 | |
| RETAINER RING | 183612 | 1 | STL | .0019 | .0400 | | | .0400 | .0575 | .0653 | |
| UNIVERSAL BRACKET - STRG. SHAFT | 183612J | 1 | CRS | .2290 | .1317 | .0228 | .0571 | .2116 | .3041 | .3455 | 50.0 |
| BEARING | 183612K | 4 | VAR | .0576 | 1.0000 | | | 1.0000 | 1.4372 | 1.6328 | |
| BEARING SPACER | 183612L | 4 | VAR | .0044 | .6400 | | | .6400 | .9196 | 1.0448 | |
| UNIVERSAL JOINT - STRG. SHAFT | 183613A | 1 | FRG | .1012 | .0191 | .1916 | .3688 | .5795 | .8327 | .9459 | 85.0 |
| O-RING - UPPER SHAFT | 183614 | 1 | RUB | .0003 | .0500 | | | .0500 | .0719 | .0817 | |
| PLASTIC RETAINER | 183616 | 2 | PLAS | .0060 | .0020 | | | .0020 | .0028 | .0032 | |
| BEARING - LOWER SHAFT | 183617 | 1 | STL | .0844 | .8000 | | | .8000 | 1.1496 | 1.3059 | |
| SPRING - LOWER SHAFT | 183618 | 1 | STL | .0253 | .0750 | | | .0750 | .1078 | .1225 | |
| ASSEMBLY COST | | | | | .0039 | .2116 | .1749 | .3904 | .5610 | .6373 | 34.0 |

VEHICLE - 07 - CHRYSLER FIFTH AVENUE

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | VARIABLE LABOR | MANUFACTURING BURDEN | COST | TOTAL PRICE | WHOLESALE PRICE | CONSUMER PRICE |
|------------------------------------|----------|-----|------|--------|----------|----------------|----------------------|--------|-------------|-----------------|----------------|
| ASM - INTERMEDIATE STEERING SHAFT | 183624 | 1 | ASSY | 2.3002 | 2.9039 | 1.7052 | 2.5199 | 7.1290 | 10.2444 | 11.6378 | 466.0 |
| SHAFT - UPPER | 183623 | 1 | STTB | .3515 | .2344 | .0404 | .0391 | .3139 | .4511 | .5124 | 17.0 |
| SPRING - LOWER SHAFT | 183624 | 1 | SSTL | .0500 | .0480 | .0041 | .0180 | .0724 | .1040 | .1181 | 20.0 |
| SHAFT - LOWER INTERMEDIATE | 183625 | 1 | CRS | .5187 | .2863 | .2440 | .5065 | 1.0368 | 1.4899 | 1.6925 | 58.0 |
| FLANGE - LOWER COUPLING | 183626 | 1 | FRG | .2921 | .1195 | .4433 | .6687 | 1.2315 | 1.7697 | 2.0104 | 94.0 |
| ASM - COUPLING SEAL | 183628 | 1 | ASSY | .1596 | .1167 | .0662 | .0605 | .2434 | .3497 | .3973 | 42.0 |
| LOWER SEAL | 183629 | 1 | NY | .0402 | .0824 | .0077 | .0104 | .1005 | .1444 | .1640 | 35.0 |
| UNIVERSAL BRACKET | 183637 | 1 | HRS | .3220 | .1446 | .0452 | .0865 | .2763 | .3970 | .4510 | 35.0 |
| BEARING | 183639 | 1 | VAR | .0576 | 1.0000 | | | 1.0000 | 1.4372 | 1.6328 | |
| BEARING SPACER | 183641 | 1 | VAR | .0041 | .6400 | | | .6400 | .9196 | 1.0448 | |
| A - UNIVERSAL JOINT - INTER. SHAFT | 183642 | 1 | FRG | .1012 | .0191 | .1916 | .3688 | .5795 | .8327 | .9459 | 85.0 |
| SHAFT (TUBE) - LOWER COUPLING | 183643 | 1 | HRS | .4029 | .2016 | .1350 | .2627 | .5923 | .8412 | .9783 | 35.0 |
| ASSEMBLY COST | | | | | | .5254 | .4987 | 1.0354 | 1.4879 | 1.6903 | 45.0 |

VEHICLE- 07- CHRYSLER FIFTH AVENUE

| DESCRIPTION | ITEM NO. | QTY | UNIT | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE | PRICE |
|---------------------|----------|-----|------|--------|----------|-------|--------|-------|-------|-------|-------|-------|
| | | | | | | | | | | | | |
| ASM - COUPLING SEAL | 183628 | 1 | ASSY | .1596 | .1167 | .0662 | .0605 | .2434 | .3497 | .3973 | | 42.0 |
| INSERT - SEAL | 183628A | 1 | STB | .0920 | .0623 | .0016 | .0036 | .0675 | .0970 | .1102 | | 2.0 |
| RUBBER - SEAL | 183628B | 1 | RUB | .0676 | .0532 | | | .0532 | .0764 | .0868 | | |
| ASSEMBLY COST | | | | | .0012 | .0646 | .0569 | .1227 | .1763 | .2003 | | 40.0 |

1983 CHRYSLER 5th AVE. BOARD 6

14 12 10 2 4 12 J 13 A

15 16 I 17 C 18 WA 12
19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

23 28 25 29 24 43 37 42 26

IN 6 12
CM 15 30 39 41

VEHICLE- 08- CHRYSLER E-CLASS

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | WHOLESALE PRICE | CONSUMER PRICE | TOOLING |
|------------------------------------|----------|-----|------|---------|----------|--------|--------|---------|-----------------|----------------|---------|
| CHRYSLER E-CLASS | | 1 | | 10.4757 | 10.2748 | 3.5785 | 4.8598 | 18.7131 | 26.8910 | 30.5487 | 1197.5 |
| ASM - SHIFTING TUBE | 183501 | 1 | ASSY | 1.0895 | .7858 | .5450 | .6114 | 1.9422 | 2.7909 | 3.1704 | 180.5 |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | 1.7867 | .7691 | .4602 | .6978 | 1.9271 | 2.7693 | 3.1461 | 245.0 |
| ASM - STEERING COLUMN MTG. BRACKET | 183541 | 1 | ASSY | 2.0015 | 1.1844 | .1183 | .1909 | 1.4936 | 2.1464 | 2.4392 | 185.0 |
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | 3.1882 | 4.4675 | .8169 | 1.0007 | 6.2851 | 9.0317 | 10.2603 | 133.0 |
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | ASSY | 2.4098 | 3.0680 | 1.6381 | 2.3590 | 7.0651 | 10.1527 | 11.5337 | 454.0 |

ASSEMBLY COST

VEHICLE- 08- CHRYSLER E-CLASS

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE CONSUMER TOOLING | |
|---------------------------|----------|-----|----------|--------|-----------------------------|-------|--------|--------|----------------------------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | PRICE | PRICE | PRICE |
| ASM - SHIFTING TUBE | 183501 | 1 | ASSY | 1.0895 | .7858 | .6114 | 1.9422 | 2.7909 | 3.1704 | 180.5 |
| SHIFTING TUBE - UPPER | 183502 | 1 | STTB | .5660 | .3582 | .1958 | .7171 | 1.0305 | 1.1706 | 34.5 |
| CLIP | 183503 | 2 | NY | .0016 | .0020 | | .0020 | .0028 | .0032 | |
| SHIFTING TUBE - LOWER | 183505 | 1 | STTB | .4200 | .2646 | .1766 | .5874 | .8441 | .9589 | 37.0 |
| LEVER - SHIFTING TUBE | 183506 | 1 | CRS | .0579 | .0986 | .0346 | .1453 | .2088 | .2372 | 50.0 |
| PAD - UPPER SHIFTING TUBE | 183507 | 1 | CRS | .0146 | .0058 | .0076 | .0163 | .0234 | .0266 | 15.0 |
| COLLAR - SHIFTING TUBE | 183510 | 1 | PLYF | .0088 | .0206 | .0526 | .1370 | .1969 | .2237 | 10.0 |
| SLEEVE - SHIFTING TUBE | 183512 | 1 | PLAS | .0206 | .0331 | .0068 | .0463 | .0665 | .0755 | 15.0 |
| ASSEMBLY COST | | | | | .0029 | .1374 | .2908 | .4179 | .4747 | 19.0 |

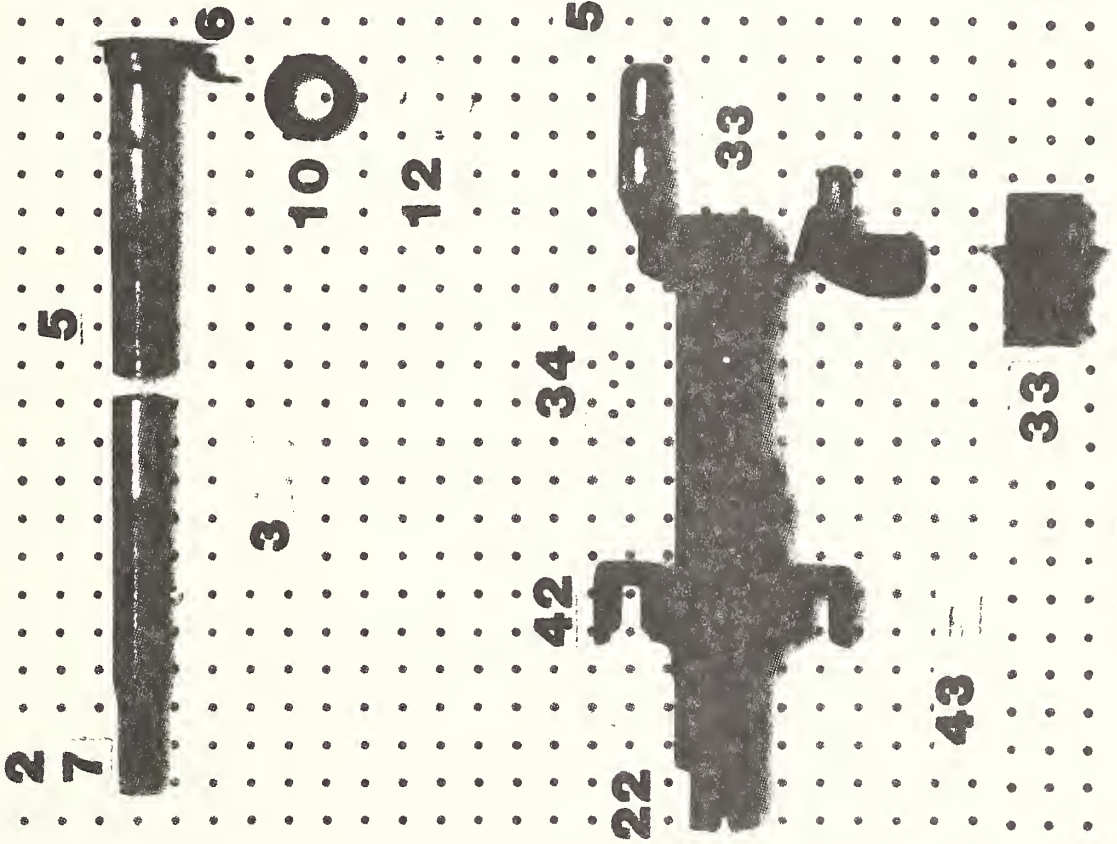
VEHICLE - 08 CHRYSLER E-CLASS

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MATERIAL | LABOR | BURDEN | MANUFACTURING COST | TOTAL | WHOLESALE PRICE | CONSUMER PRICE | TOOLING |
|---------------------------------|----------|-----|----------|--------|-------------------|--------|---------|--------------------|---------|-----------------|----------------|---------|
| | | | | | | | | | | | | |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | 1:7867: | .7691: | .4602: | .6978: | 1.9271: | 2.7693: | 3.1461: | 245.0 | | |
| JACKET - HOUSING - STRG. COL. | 183522 | 1 | 1:0959: | .5299: | .0827: | .2039: | .8165: | 1.1733: | 1.3329: | 130.0 | | |
| SLEEVE - STRG. COL. JACKET HSG. | 183533 | 1 | 1:6890: | .1878: | .0902: | .1721: | .4501: | .6468: | .7348: | 65.0 | | |
| RIVET | 183534 | 3 | 1:0018: | .0150: | | | .0150: | .0216: | .0246: | | | |
| ASSEMBLY COST | | | | .0364: | .2873: | .3218: | .6455: | .9276: | 1.0538: | 50.0 | | |

VEHICLE- 08- CHRYSLER E-CLASS

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE CONSUMER PRICE | | |
|------------------------------------|----------|-----|----------|--------|-----------------------------|-------|--------|--------|--------------------------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | |
| ASM - STEERING COLUMN MTG. BRACKET | 83541 | 1 | ASSY | 2.0015 | 1.1844 | .1183 | .1909 | 1.4936 | 2.1464 | 2.4382 | 185.0 |
| MTG. BRACKET - STRG. COL. | 83542 | 1 | HRS | 1.0679 | .3749 | .0041 | .0131 | .3921 | .5634 | .6400 | 50.0 |
| SPACER - STRG. COL. BRKT. | 83543 | 2 | FLYP | .0348 | .0196 | .0192 | .0260 | .0648 | .0932 | 1.058 | 30.0 |
| LOWER MTG. BRACKET - STRG. COL. | 83551 | 1 | HRS | .8988 | .7892 | .0550 | .1260 | .9702 | 1.3942 | 1.5839 | 100.0 |
| ASSEMBLY COST | | | | | .0007 | .0400 | .0258 | .0665 | .0956 | 1.084 | 5.0 |

1983 CHRYSLER E-CLASS BOARD 5



VEHICLE- 08- CHRYSLER_E-CLASS

| DESCRIPTION | ITEM NO. | QTY | MTRL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|-----------------------------------|----------|-----|------|--------|-----------------------------|-------|--------|----------------------------|--------|---------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | 000S |
| ASM - STEERING SHAFT | 83601 | 1 | ASSY | 3.1882 | 4.4675 | .8169 | 1.0007 | 6.2851 | 9.0317 | 10.2603 | 133.0 |
| SHAFT - UPPER - STRG. | 83602 | 1 | CRS | 1.5371 | .6031 | .1950 | .3481 | 1.1462 | 1.6471 | 1.8711 | 19.0 |
| SHAFT - LOWER - STRG. | 83604 | 1 | HRS | 1.0263 | .3182 | .0566 | .0539 | .4287 | .6160 | .6998 | 5.0 |
| BEARING | 83610 | 1 | STL | .0314 | .5500 | | | .5500 | .7904 | .8979 | |
| RETAINER RING | 83612 | 1 | STL | .0027 | .0400 | | | .0400 | .0575 | .0653 | |
| UNIVERSAL BRACKET - STRG. SHAFT | 83612J | 1 | CRS | .2290 | .1317 | .0228 | .0571 | .2116 | .3041 | .3455 | 50.0 |
| ASM - STRG. SHAFT UNIVERSAL JOINT | 83613D | 1 | ASSY | .2352 | 1.8339 | .3464 | .3751 | 2.5554 | 3.6721 | 4.1717 | 25.0 |
| O-RING - UPPER SHAFT | 83614 | 1 | RUB | .0004 | .0500 | | | .0500 | .0719 | .0817 | |
| DOWEL PIN - UPPER SHAFT | 83615 | 1 | STL | .0125 | .0600 | | | .0600 | .0862 | .0979 | |
| PLASTIC RETAINER | 83616 | 2 | PLAS | .0024 | .0020 | | | .0020 | .0028 | .0032 | |
| BEARING - LOWER SHAFT | 83617 | 1 | STL | .0862 | .8000 | | | .8000 | 1.1496 | 1.3059 | |
| SPRING - LOWER SHAFT | 83618 | 1 | STL | .0250 | .0750 | | | .0750 | 1.078 | 1.225 | |
| ASSEMBLY COST | | | | | .0036 | .1961 | .1665 | .3662 | .5262 | .5978 | 34.0 |

VEHICLE- 08- CHRYSLER E-CLASS

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | CONSUMER | TOOLING |
|------------------------------------|----------|-----|------|--------|----------|-------|--------|--------|--------|--------|----------|---------|
| ASM - STRG. SHAFT UNIVERSAL JOINT | 183613D | 1 | ASSY | .2352 | 1.8339 | .3464 | .3751 | 2.5554 | 3.6721 | 4.1717 | 25.0 | |
| BEARING | 183612K | 4 | STL | .0576 | 1.0000 | | | 1.0000 | 1.4372 | 1.6328 | | |
| BEARING SPACER | 183612L | 4 | STL | .0040 | .6400 | | | .6400 | .9196 | 1.0448 | | |
| UNIVERSAL JOINT BLOCK - STRG SHAFT | 183613A | 1 | HRS | .0924 | .0661 | .1313 | .1297 | .3271 | .4700 | .5339 | 10.0 | |
| SHORT SHAFT - U-JOINT BRG. | 183613B | 2 | HRS | .0388 | .0632 | .0776 | .0886 | .2294 | .3296 | .3744 | 10.0 | |
| LONG SHAFT - U-JOINT BRG. | 183613C | 1 | HRS | .0424 | .0624 | .0235 | .0467 | .1326 | .1905 | .2164 | | |
| ASSEMBLY COST | | | | | .0022 | .1140 | .1101 | .2263 | .3252 | .3694 | 5.0 | |

VEHICLE- 08- CHRYSLER E-CLASS

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | WHOLESALE CONSUMER TOOLING | | | | |
|-----------------------------------|----------|-----|----------|--------|-----------------------------|--------|----------------------------|--------|---------|---------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | |
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | 1ASSY | 2.4098 | 3.0680 | 1.6381 | 2.3590 | 7.0651 | 10.1527 | 11.5337 | 454.0 |
| SHAFT - UPPER | 183623 | 1 | 1STTB | .3515 | .2344 | .0404 | .0391 | .3139 | .4511 | .5124 | 17.0 |
| SPRING - LOWER SHAFT | 183624 | 1 | 1SSTL | .0504 | .0703 | .0064 | .0180 | .0947 | .1361 | .1544 | 20.0 |
| SHAFT - LOWER INTERMEDIATE | 183625 | 1 | 1ICRS | .5187 | .2875 | .3072 | .5717 | 1.1664 | 1.6761 | 1.9040 | 75.0 |
| FLANGE - LOWER COUPLING | 183626 | 1 | 1IFRG | .3294 | .1509 | .4433 | .6687 | 1.2629 | 1.8148 | 2.0616 | 94.0 |
| ASM - COUPLING SEAL | 183628 | 1 | 1ASSY | .1596 | .1147 | .0685 | .0640 | .2472 | .3552 | .4035 | 42.0 |
| LOWER SEAL | 183629 | 1 | 1INY | .0750 | .1567 | .0077 | .0104 | .1748 | .2512 | .2854 | 35.0 |
| FULL PIN - UNIVERSAL ATTACHING | 183632 | 1 | 1ICRS | .0394 | .0162 | .0057 | .0201 | .0420 | .0604 | .0686 | 15.0 |
| UNIVERSAL BRACKET | 183637 | 1 | 1HRS | .3220 | .1446 | .0452 | .0845 | .2763 | .3970 | .4510 | 35.0 |
| HALF PIN - UNIVERSAL COUPLING | 183638 | 2 | 2ICRS | .0136 | .0058 | .0096 | .0328 | .0482 | .0692 | .0786 | 15.0 |
| A-BEARING | 183639 | 4 | 4VAR | .0576 | 1.0000 | | | 1.0000 | 1.4372 | 1.6328 | |
| BEARING SPACER | 183641 | 4 | 4VAR | .0044 | .6400 | | | .6400 | .9196 | 1.0448 | |
| U-JOINT - RETAINER BLOCK | 183642 | 1 | 1IFM | .0853 | .0340 | .0437 | .0863 | .1640 | .2357 | .2678 | 36.0 |
| SHAFT (TUBE) - LOWER COUPLING | 183643 | 1 | 1HRS | .4029 | .2016 | .1350 | .2627 | .5993 | .8612 | .9783 | 35.0 |
| ASSEMBLY COST | | | | | .0113 | .5254 | .4987 | 1.0354 | 1.4879 | 1.6903 | 45.0 |

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VEHICLE- 08- CHRYSLER E-CLASS

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE CONSUMER TOOLING | | |
|---------------------|----------|-----|----------|--------|-----------------------------|--------|-------|-------|----------------------------|-------|------|
| | | | | | LABOR | BURDEN | PRICE | PRICE | PRICE | PRICE | |
| ASM - COUPLING SEAL | 183628 | 1 | ASSY | .1596 | .1147 | .0685 | .0640 | .2472 | .3552 | .4035 | 42.0 |
| INSERT - SEAL | 183628A | 1 | STTB | .0920 | .0603 | .0039 | .0071 | .0713 | .1025 | .1164 | 2.0 |
| RUBBER - SEAL | 183628B | 1 | RUB | .0676 | .0532 | | | .0532 | .0764 | .0868 | |
| ASSEMBLY COST | | | | | .0012 | .0646 | .0569 | .1227 | .1763 | .2003 | 40.0 |

1983 CHRYSLER E-CLASS BOARD 6

14 12 10 2 4 12 J 13 D

~~15 14 13 12 11 10 9 8 7 6 5 4 3 2 1~~ A B C

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

37 29 24 25 28 43 26



42 38

32 41

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IN 6 12

CM 15 30

VEHICLE- 09- CHRYSLER/PLYMOUTH RELIANT

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | WHOLESALE PRICE | CONSUMER PRICE |
|------------------------------------|----------|-----|------|---------|----------|--------|--------|---------|-----------------|----------------|
| CHRYSLER/PLYMOUTH RELIANT | | 1 | | 10.5135 | 10.2970 | 3.5688 | 4.8705 | 18.7363 | 26.9243 | 30.5867 |
| ASM - SHIFTING TUBE | 183501 | 1 | ASSY | 1.0895 | .7858 | .5450 | .6114 | 1.9422 | 2.7909 | 3.1704 |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | 1.7867 | .7691 | .4602 | .6978 | 1.9271 | 2.7493 | 3.1441 |
| ASM - STEERING COLUMN MTG. BRACKET | 183541 | 1 | ASSY | 2.0393 | 1.2046 | .1109 | .2051 | 1.5206 | 2.1852 | 2.4824 |
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | 3.1882 | 4.4675 | .8169 | 1.0007 | 6.2851 | 9.0317 | 10.2603 |
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | ASSY | 2.4098 | 3.0700 | 1.6358 | 2.3555 | 7.0613 | 10.1472 | 11.5275 |
| ASSEMBLY COST | | | | | | | | | | |

VEHICLE- 09- CHRYSLER/PLYMOUTH RELIANT

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | WHOLESALE CONSUMER | |
|---------------------------|----------|-----|----------|--------|----------|-------|--------|--------|--------------------|--------|
| | | | | | | | | | PRICE | PRICE |
| ASM - SHIFTING TUBE | 183501 | 1 | ASSY | 1.0895 | .7858 | .5450 | .6114 | 1.9422 | 2.7909 | 3.1704 |
| SHIFTING TUBE - UPPER | 183502 | 1 | STTB | .5660 | .3582 | .1631 | .1958 | .7171 | 1.0305 | 1.1706 |
| CLIP | 183503 | 2 | INY | .0016 | .0020 | | | .0020 | .0028 | .0032 |
| SHIFTING TUBE - LOWER | 183505 | 1 | STTB | .4200 | .2646 | .1462 | .1766 | .5874 | .8441 | .9589 |
| LEVER - SHIFTING TUBE | 183506 | 1 | CRS | .0579 | .0986 | .0121 | .0346 | .1453 | .2088 | .2372 |
| PAD - UPPER SHIFTING TUBE | 183507 | 1 | CRS | .0146 | .0058 | .0029 | .0076 | .0163 | .0234 | .0266 |
| COLLAR - SHIFTING TUBE | 183510 | 1 | PLYF | .0088 | .0206 | .0638 | .0526 | .1370 | .1969 | .2237 |
| SLEEVE - SHIFTING TUBE | 183512 | 1 | PLAS | .0206 | .0331 | .0064 | .0068 | .0463 | .0665 | .0755 |
| ASSEMBLY COST | | | | | .0029 | .1505 | .1374 | .2908 | .4179 | .4747 |

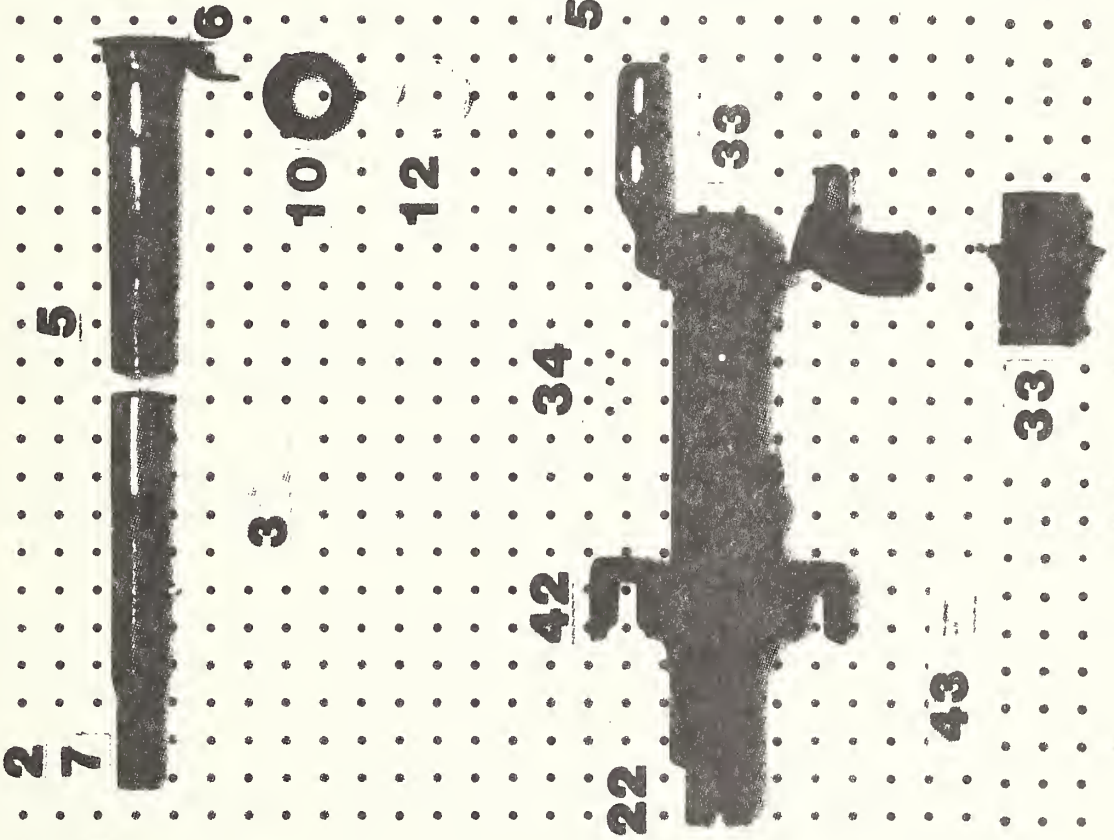
VEHICLE - 99- DODGE/PLYMOUTH RELIANT

| DESCRIPTION | ITEM | NO. | QTY | MTRL | WEIGHT | VARIABLE MANUFACTURING COST | | WHOLESALE CONSUMER TOOLING | | | | |
|---------------------------------|--------|-----|-----|------|--------|-----------------------------|-------|----------------------------|--------|--------|--------|-------|
| | | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | 1 | 1 | 1.7867 | .7691 | .4602 | .6978 | 1.9271 | 2.7693 | 3.1461 | 245.0 |
| JACKET - HOUSING - STRG. COL. | 183522 | 1 | 1 | 1 | 1.0959 | .5299 | .0827 | .2039 | .8165 | 1.1733 | 1.3329 | 130.0 |
| SLEEVE - STRG. COL. JACKET HSG. | 183533 | 1 | 1 | 1 | .6890 | .1873 | .0902 | .1721 | .4501 | .6468 | .7348 | 65.0 |
| RIVET | 183534 | 3 | 1 | 1 | .0018 | .0150 | | | .0150 | .0216 | .0246 | |
| ASSEMBLY COST | | | | | | .0364 | .2873 | .3218 | .6455 | .9276 | 1.0538 | 50.0 |

VEHICLE- 09- CHRYSLER/PLYMOUTH RELIANT

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | VARIABLE LABOR | MANUFACTURING BURDEN | TOTAL COST | WHOLESALE PRICE | CONSUMER PRICE |
|------------------------------------|----------|-----|------|--------|----------|----------------|----------------------|------------|-----------------|----------------|
| ASM - STEERING COLUMN MTG. BRACKET | 183541 | 1 | ASSY | 2.0393 | 1.2046 | .1109 | .2051 | 1.5206 | 2.1852 | 2.4824 |
| MTG. BRACKET - STRG. COL. | 183542 | 1 | HRS | 1.0679 | .3749 | .0041 | .0131 | .3921 | .5634 | .6400 |
| SPACER NUT - STRG. COL. BRKT. | 183543 | 2 | ZN | .0726 | .0398 | .0118 | .0402 | .0918 | .1320 | .1500 |
| LOWER MTG. BRACKET - STRG. COL. | 183551 | 1 | HRS | .8988 | .7892 | .0550 | .1260 | .9702 | 1.3942 | 1.5838 |
| ASSEMBLY COST | | | | | .0007 | .0400 | .0258 | .0665 | .0756 | 5.0 |

1983 PLYMOUTH RELIANT BOARD 5



VEHICLE- 09- CHRYSLER/PLYMOUTH RELIANT

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | VARIABLE MANUFACTURING COST | TOTAL | WHOLESALE PRICE | CONSUMER PRICE | TOOLING |
|-----------------------------------|----------|-----|------|--------|----------|-----------------------------|--------|-----------------|----------------|---------|
| ASM - STEERING SHAFT | 83601 | 1 | ASSY | 3.1882 | 4.4675 | .8169 | 1.0007 | 9.0317 | 10.2603 | 133.0 |
| SHAFT - UPPER - STRG. | 83602 | 1 | CRS | 1.5374 | .6031 | .1950 | .3481 | 1.6474 | 1.8711 | 19.0 |
| SHAFT - LOWER - STRG. | 83604 | 1 | HRS | 1.0263 | .3182 | .0566 | .0539 | .6160 | .6998 | 5.0 |
| BEARING | 83610 | 1 | STL | .0314 | .5500 | | | .7904 | .8979 | |
| RETAINER RING | 83612 | 1 | STL | .0027 | .0400 | | | .0575 | .0653 | |
| UNIVERSAL BRACKET - STRG. SHAFT | 83612J | 1 | CRS | 2.290 | .1317 | .0228 | .0574 | .3041 | .3455 | 50.0 |
| ASM - STRG. SHAFT UNIVERSAL JOINT | 83613D | 1 | ASSY | .2352 | 1.8339 | .3464 | .3751 | 3.6721 | 4.1717 | 25.0 |
| O-RING - UPPER SHAFT | 83614 | 1 | RUB | .0004 | .0500 | | | .0719 | .0817 | |
| DOWEL PIN - UPPER SHAFT | 83615 | 1 | STL | .0125 | .0600 | | | .0862 | .0979 | |
| PLASTIC RETAINER | 83616 | 2 | PLAS | .0024 | .0020 | | | .0028 | .0032 | |
| BEARING - LOWER SHAFT | 83617 | 1 | STL | .0862 | .8000 | | | 1.1496 | 1.3059 | |
| SPRING - LOWER SHAFT | 83618 | 1 | STL | .0250 | .0750 | | | .1078 | .1225 | |
| ASSEMBLY COST | | | | | .0036 | .1961 | .1665 | .5262 | .5978 | 34.0 |

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VEHICLE- 09- CHRYSLER/PLYMOUTH RELIANT

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | VARIABLE MANUFACTURING COST | TOTAL | PRICE | CONSUMER |
|------------------------------------|----------|-----|------|--------|----------|-----------------------------|--------|--------|----------|
| | | | | | | | | | |
| ASM - STRG. SHAFT UNIVERSAL JOINT | 183613D | 1 | ASSY | .2352 | 1.8339 | .3464 | 2.5554 | 3.6721 | 4.1717 |
| BEARING | 183612K | 4 | STL | .0576 | 1.0000 | | 1.0000 | 1.4372 | 1.6328 |
| BEARING SPACER | 183612L | 4 | STL | .0040 | .6400 | | .6400 | .9196 | 1.0448 |
| UNIVERSAL JOINT BLOCK - STRG SHAFT | 183613A | 1 | HRS | .0924 | .0661 | .1313 | .3271 | .4700 | .5339 |
| SHORT SHAFT - U-JOINT BRG. | 183613B | 2 | HRS | .0388 | .0632 | .0776 | .2294 | .3296 | .3744 |
| LONG SHAFT - U-JOINT BRG. | 183613C | 1 | HRS | .0424 | .0624 | .0235 | .1326 | .1905 | .2164 |
| ASSEMBLY COST | | | | | .0022 | .1140 | .2263 | .3252 | .3694 |

VEHICLE- 09-- CHRYSLER/PLYMOUTH RELIANT

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|-----------------------------------|----------|-----|----------|--------|-----------------------------|--------|--------|----------------------------|---------|---------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - INTERMEDIATE STEERING SHAFT | 83621 | 1 | ASSY | 2.4098 | 3.0700 | 1.6358 | 2.3555 | 7.0613 | 10.1472 | 11.5275 | 454.0 |
| SHAFT - UPPER | 83623 | 1 | STTB | .3515 | .2344 | .0404 | .0391 | .3139 | .4511 | .5124 | 17.0 |
| SPRING - LOWER SHAFT | 83624 | 1 | SSTL | .0504 | .0703 | .0064 | .0180 | .0947 | .1361 | .1546 | 20.0 |
| SHAFT - LOWER INTERMEDIATE | 83625 | 1 | CRS | .5187 | .2875 | .3072 | .5717 | 1.1664 | 1.6761 | 1.9040 | 65.0 |
| FLANGE - LOWER COUPLING | 83626 | 1 | FRG | .3294 | .1509 | .4433 | .6687 | 1.2629 | 1.8148 | 2.0616 | 94.0 |
| ASM - COUPLING SEAL | 83628 | 1 | ASSY | .1596 | .1167 | .0662 | .0605 | .2434 | .3477 | .3973 | 42.0 |
| LOWER SEAL | 83629 | 1 | NY | .0750 | .1567 | .0077 | .0104 | .1748 | .2512 | .2854 | 35.0 |
| FULL PIN - UNIVERSAL ATTACHING | 83632 | 1 | CRS | .0394 | .0162 | .0057 | .0201 | .0420 | .0604 | .0686 | 15.0 |
| UNIVERSAL BRACKET | 83637 | 1 | HRS | .3220 | .1446 | .0452 | .0865 | .2763 | .3970 | .4510 | 35.0 |
| HALF PIN - UNIVERSAL COUPLING | 83638 | 2 | CRS | .0136 | .0058 | .0096 | .0328 | .0482 | .0692 | .0786 | 15.0 |
| BEARING | 83639 | 4 | VAR | .0576 | 1.0000 | | | 1.0000 | 1.4372 | 1.6328 | |
| BEARING SPACER | 83641 | 4 | VAR | .0044 | .6400 | | | .6400 | .9196 | 1.0448 | |
| U-JOINT - RETAINER BLOCK | 83642 | 1 | IRM | .0853 | .0340 | .0437 | .0863 | .1640 | .2357 | .2678 | 36.0 |
| SHAFT (TUBE) - LOWER COUPLING | 83643 | 1 | HRS | .4029 | .2016 | .1350 | .2627 | .5993 | .8612 | .9783 | 35.0 |
| ASSEMBLY COST | | | | | .0113 | .5254 | .4987 | 1.0354 | 1.4879 | 1.6903 | 45.0 |

VEHICLE- 09- CHRYSLER/PLYMOUTH RELIANT

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE CONSUMER | | |
|---------------------|----------|-----|----------|--------|-----------------------------|--------|-------|-------|--------------------|-------|------|
| | | | | | LABOR | BURDEN | PRICE | PRICE | PRICE | PRICE | |
| ASM - COUPLING SEAL | 83628 | 1 | ASSY | .1596 | .1167 | .0662 | .0605 | .2434 | .3497 | .3973 | 42.0 |
| INSERT - SEAL | 83628A | 1 | STTB | .0920 | .0623 | .0016 | .0036 | .0675 | .0970 | .1102 | 2.0 |
| RUBBER - SEAL | 83628B | 1 | RUB | .0676 | .0532 | | | .0532 | .0764 | .0868 | |
| ASSEMBLY COST | | | | | .0012 | .0646 | .0569 | .1227 | .1763 | .2003 | 40.0 |

VEHICLE- 10- AMC/RENAULT ALLIANCE

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | CONSUMER | TOOLING |
|------------------------------------|----------|-----|------|--------|----------|--------|--------|---------|---------|---------|----------|---------|
| | | | | | | | | | | | | |
| AMC/RENAULT ALLIANCE | | 1 | | 4.8699 | 4.3109 | 2.5402 | 3.2293 | 10.0804 | 14.4858 | 16.4559 | 843.0 | |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | .8503 | .6110 | .1862 | .3355 | 1.1327 | 1.6277 | 1.8491 | 62.0 | |
| ASM - STEERING COLUMN MTG. BRACKET | 183541 | 1 | ASSY | .5682 | .1812 | .0086 | .0285 | .2183 | .3137 | .3563 | 85.0 | |
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | .9198 | .4017 | .3045 | .4025 | 1.1087 | 1.5932 | 1.8098 | 51.0 | |
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | ASSY | 2.5316 | 3.1170 | 2.0409 | 2.4628 | 7.6207 | 10.9512 | 12.4407 | 645.0 | |
| ASSEMBLY COST | | | | | | | | | | | | |

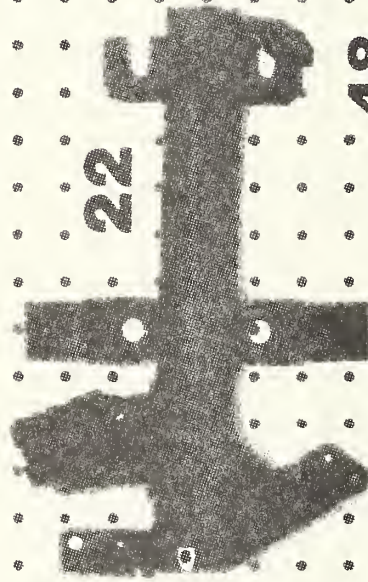
VEHICLE- 10- AMC/RENAULT ALLIANCE

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE CONSUMER | | |
|-------------------------------|----------|-----|----------|--------|-----------------------------|-------|--------|--------|--------------------|--------|------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | 11ASSY | .8503 | .6110 | .1862 | .3355 | 1.1327 | 1.6277 | 1.8491 | 62.0 |
| JACKET - HOUSING - STRG. COL. | 183522 | 1 | 11STTB | .8503 | .5894 | .1130 | .2678 | .9702 | 1.3942 | 1.5838 | 57.0 |
| ASSEMBLY COST | | | | | .0216 | .0732 | .0677 | .1625 | .2335 | .2653 | 5.0 |

VEHICLE- 10- AMC/RENAULT ALLIANCE

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | 11ASSY | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE PRICE | | CONSUMER PRICE | |
|------------------------------------|----------|-----|----------|--------|--------|-----------------------------|--------|-------|--------|-----------------|-------|----------------|-------|
| | | | | | | LABOR | BURDEN | LABOR | BURDEN | PRICE | PRICE | PRICE | PRICE |
| ASM - STEERING COLUMN MTG. BRACKET | 183541 | 1 | .1812 | .5682 | | .0086 | .0285 | .2183 | .3137 | .3563 | 85.0 | | |
| BRACKET - STRG. COL. MTG. | 183542 | 1 | .0728 | .2742 | | .0043 | .0136 | .0907 | .1303 | .1480 | 35.0 | | |
| BRACKET - BOTTOM - STRG. COL. MTG. | 183548 | 1 | .1084 | .2940 | | .0043 | .0149 | .1276 | .1834 | .2083 | 50.0 | | |
| ASSEMBLY COST | | | | | | | | | | | | | |

1983 AMC ALLIANCE BOARD 5



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VEHICLE- 10- AMC/RENAULT ALLIANCE

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | VARIABLE MANUFACTURING COST | | WHOLESALE CONSUMER TOOLING | | | | |
|-----------------------|----------|-----|------|--------|-----------------------------|-------|----------------------------|--------|--------|--------|------|
| | | | | | MATERIAL | LABOR | TOTAL | PRICE | PRICE | 000S | |
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | .9198 | .4017 | .3045 | .4025 | 1.1087 | 1.5932 | 1.8098 | 51.0 |
| SHAFT - UPPER - STRG. | 183602 | 1 | STTB | .8264 | .3104 | .1361 | .2349 | .6814 | .9792 | 1.1124 | 19.0 |
| COLLAR - UPPER SHAFT | 183608 | 2 | RUR | .0550 | .0650 | .0446 | .0512 | .1608 | .2310 | .2624 | 25.0 |
| BUSHING - UPPER SHAFT | 183620 | 2 | STTB | .0384 | .0256 | .0838 | .0906 | .2000 | .2874 | .3264 | 5.0 |
| ASSEMBLY COST | | | | | .0007 | .0400 | .0258 | .0665 | .0956 | .1086 | 2.0 |

VEHICLE- 10- AMC/RENAULT ALLIANCE

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | VARIABLE MANUFACTURING COST | TOTAL | PRICE | CONSUMER PRICE | | |
|------------------------------------|----------|-----|------|--------|----------|-----------------------------|--------|--------|----------------|---------|-------|
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | ASSY | 2.5316 | 3.1170 | 2.0409 | 2.4628 | 7.6207 | 10.9512 | 12.4407 | 645.0 |
| FLANGE - UPPER COUPLING | 183622 | 1 | FRG | .2265 | .1010 | .1913 | .3072 | .5995 | .8615 | .9787 | 107.0 |
| TUBE SHAFT - UPPER | 183623 | 1 | STTB | .5256 | .3718 | .0538 | .0512 | .4768 | .6852 | .7784 | 15.0 |
| SHAFT - LOWER | 183625 | 1 | CRS | .6906 | .2948 | .2743 | .2734 | .8425 | 1.2107 | 1.3754 | 60.0 |
| BRACKET - LOWER COUPLING | 183626 | 1 | HRS | .1623 | .0517 | .0295 | .0491 | .1303 | .1872 | .2127 | 25.0 |
| UNIVERSAL BRACKET | 183637 | 1 | FRG | .2215 | .0976 | .1277 | .2369 | .4622 | .6642 | .7545 | 85.0 |
| BEARING | 183639 | 4 | VAR | .0572 | 1.0000 | | | 1.0000 | 1.4372 | 1.6328 | |
| BEARING SPACER | 183641 | 4 | RUB | .0012 | .3600 | | | .3600 | .5172 | .5876 | |
| UNIVERSAL JOINT - INTER. SHAFT | 183642 | 1 | FRG | .1051 | .0557 | .4573 | .6618 | 1.1748 | 1.6882 | 1.9178 | 200.0 |
| RETAINING CLIP | 183646 | 2 | INY | .0026 | .0078 | | | .0078 | .0112 | .0128 | |
| NUT - BUSHING TO SHAFT FLANGE | 183657 | 2 | CRS | .0200 | .0700 | | | .0700 | .1006 | .1142 | |
| BOLT - BUSHING TO SHAFT | 183658 | 2 | CRS | .1080 | .1100 | | | .1100 | .1580 | .1794 | |
| RUBBER - LOWER COUPLING BUSHING | 183659 | 2 | RUB | .0180 | .1060 | | | .1060 | .1524 | .1732 | |
| SLEEVE - BUSHING INNER | 183660 | 2 | CRS | .0680 | .0700 | | | .0700 | .1006 | .1142 | |
| COUPLING- STRG INTER SHAFT TO GEAR | 183661 | 1 | AL | .0800 | .0828 | .0392 | .0583 | .1803 | .2591 | .2943 | |
| ADAPTOR - COUPLING TO STRG GEAR | 183662 | 1 | HRS | .1940 | .1417 | .1003 | .1859 | .4279 | .6149 | .6985 | 33.0 |
| BOLT - ADAPTOR TO SHAFT | 183663 | 1 | CRS | .0410 | .0450 | | | .0450 | .0647 | .0735 | |
| NUT - ADAPTOR TO SHAFT BOLT | 183664 | 1 | CRS | .0100 | .0350 | | | .0350 | .0503 | .0571 | |
| ASSEMBLY COST | | | | | .1161 | .7675 | .6390 | 1.5226 | 2.1880 | 2.4856 | 120.0 |

1983 AMC ALLIANCE BOARD



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VEHICLE- 11- TOYOTA TERCEL

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER PRICING | | | |
|------------------------------------|----------|-----|----------|--------|-----------------------------|--------|--------|----------------------------|---------|---------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| TOYOTA TERCEL | | 1 | | 8.1484 | 9.4086 | 3.2470 | 4.3406 | 16.9962 | 24.4241 | 27.7464 | 991.0 |
| ASM - STEERING COLUMN JACKET | 83521 | 1 | ASSY | .8613 | .6188 | .5077 | .5534 | 1.6799 | 2.4140 | 2.7424 | 120.0 |
| ASM - STEERING COLUMN MTG. BRACKET | 83541 | 1 | ASSY | 1.6691 | 1.0252 | .1049 | .1474 | 1.2775 | 1.8358 | 2.0955 | 140.0 |
| ASM - STEERING SHAFT | 83601 | 1 | ASSY | 4.2620 | 5.3566 | 1.5381 | 2.2381 | 9.1328 | 13.1242 | 14.9093 | 381.0 |
| ASM - INTERMEDIATE STEERING SHAFT | 83621 | 1 | ASSY | 1.3560 | 2.4080 | 1.0963 | 1.4017 | 4.9060 | 7.0501 | 8.0092 | 350.0 |
| ASSEMBLY COST | | | | | | | | | | | |

VEHICLE- 11- TOYOTA TERCEL

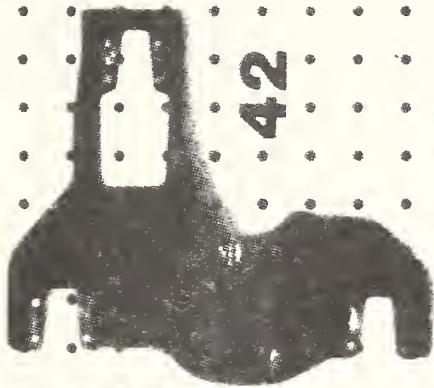
| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | VARIABLE LABOR | MANUFACTURING BURDEN | COST | TOTAL PRICE | WHOLESALE PRICE | CONSUMER PRICE |
|-------------------------------|----------|-----|------|--------|----------|----------------|----------------------|--------|-------------|-----------------|----------------|
| ASM - STEERING COLUMN JACKET | 183521 | 1 | 1 | .8613 | .6188 | .5077 | .5534 | 1.6799 | 2.4140 | 2.7424 | 120.0 |
| JACKET - HOUSING - STRG. COL. | 183522 | 1 | 1 | .6779 | .3994 | .1076 | .1943 | .7013 | 1.0078 | 1.1449 | 60.0 |
| FLANGE - JACKET HSG. | 183540E | 1 | 1 | .1834 | .1514 | .0076 | .0127 | .1717 | .2467 | .2803 | 45.0 |
| ASSEMBLY COST | | | | | .0680 | .3925 | .3464 | .8069 | 1.1595 | 1.3172 | 15.0 |

VEHICLE- 11- TOYOTA TERCEL

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | VARIABLE MANUFACTURING COST | | TOTAL | | WHOLESALE CONSUMER TOOLING | | |
|------------------------------------|----------|-----|----------|--------|-----------------------------|--------|-------|--------|----------------------------|--------|-------|
| | | | | | LABOR | BURDEN | LABOR | BURDEN | PRICE | PRICE | |
| ASM - STEERING COLUMN MTG. BRACKET | 83541 | 1 | ASSY | 1.6691 | 1.0252 | .1049 | .1474 | 1.2775 | 1.8350 | 2.0855 | 140.0 |
| BRACKET - STRG. COL. MTG. | 83542 | 1 | HRS | 1.5494 | .9579 | .0102 | .0318 | .9999 | 1.4369 | 1.6323 | 75.0 |
| SPACER - STRG. COL. BRKT. | 83543 | 3 | ZN | .1197 | .0660 | .0180 | .0603 | .1443 | .2073 | .2355 | 45.0 |
| ASSEMBLY COST | | | | | .0013 | .0767 | .0553 | .1333 | .1916 | .2177 | 20.0 |

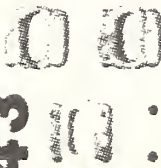
1983 TOYOTA TERCEL BOARD 5

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VEHICLE- 11- TOYOTA TERCEL

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | WHOLESALE | CONSUMER | TOOLING |
|---------------------------------|----------|-----|------|--------|----------|--------|--------|--------|---------|-----------|----------|---------|
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | 4.2620 | 5.3566 | 1.5381 | 2.2381 | 9.1328 | 13.1242 | 14.9093 | 381.0 | |
| SHAFT - UPPER - STRG. | 183602 | 1 | CRS | 1.8408 | .7685 | .1631 | .3425 | 1.2741 | 1.8309 | 2.0799 | 17.0 | |
| SHAFT - LOWER - STRG. | 183604 | 1 | STB | .8034 | .4910 | .0566 | .0539 | .6015 | .8644 | .9820 | 7.0 | |
| BEARING | 183610 | 1 | STL | .1078 | .6500 | | | .6500 | .9341 | 1.0611 | | |
| RETAINER RING | 183612 | 2 | STL | .0052 | .0800 | | | .0800 | .1150 | .1306 | | |
| UNIVERSAL JOINT - STRG. SHAFT | 183612D | 1 | STF | .1012 | .0485 | .1916 | .3688 | .6082 | .8750 | .9940 | 85.0 | |
| CLEVIS - STRG. SHAFT | 183612E | 1 | STF | .3735 | .1549 | .3443 | .5250 | 1.0242 | 1.4718 | 1.6720 | 123.0 | |
| BOLT | 183612G | 1 | STL | .0685 | .0590 | | | .0590 | .0848 | .0963 | | |
| UNIVERSAL BRACKET - STRG. SHAFT | 183612J | 1 | STF | .6259 | .2402 | .2234 | .4634 | .9270 | 1.3321 | 1.5133 | 100.0 | |
| BEARING | 183612K | 4 | STL | .0576 | 1.0000 | | | 1.0000 | 1.4372 | 1.6328 | | |
| BEARING SPACER | 183612L | 4 | RUB | .0040 | .6400 | | | .6400 | .9196 | 1.0448 | | |
| BEARING - LOWER SHAFT | 183617 | 1 | STL | .1865 | .9500 | | | .9500 | 1.3652 | 1.5509 | | |
| RETAINER - BEARING | 183620A | 1 | STL | .0047 | .0500 | | | .0500 | .0719 | .0817 | | |
| FLUG - STRG. SHAFT | 183620B | 1 | AL | .0006 | .0009 | .0032 | .0074 | .0115 | .0165 | .0187 | 5.0 | |
| POLY-GEL | 183620C | 1 | PLAS | .0823 | .1850 | | | .1850 | .2658 | .3019 | | |
| ASSEMBLY COST | | | | | .0386 | .5559 | .4771 | 1.0716 | 1.5399 | 1.7493 | 44.0 | |

VEHICLE- 11- TOYOTA TERCEL

COST SUMMARY OF FMVSS #203 & 204

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | | |
|-----------------------------------|----------|-----|------|--------|-----------------------------|--------|--------|----------------------------|--------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE | PRICE |
| ASM - INTERMEDIATE STEERING SHAFT | 183621 | 1 | 1 | ASSY | 1.3560 | 2.4080 | 1.0963 | 1.4017 | 4.9060 | 7.0501 | 8.0092 | 350.0 |
| FLANGE - COUPLING UPPER | 183622 | 1 | 1 | HRS | .2103 | .1339 | .0452 | .0865 | .2656 | .3817 | .4336 | 35.0 |
| SHAFT - STRG. COL. INTERMEDIATE | 183623 | 1 | 1 | STL | .7104 | .3167 | .2534 | .2846 | .8547 | 1.2282 | 1.3952 | 25.0 |
| UNIVERSAL BRACKET | 183637 | 1 | 1 | HRS | .2567 | .2014 | .1412 | .2007 | .5433 | .7807 | .8869 | 55.0 |
| BEARING | 183639 | 4 | 1 | VAR | .0576 | 1.0000 | | | 1.0000 | 1.4372 | 1.6328 | |
| BEARING SPACER | 183641 | 4 | 1 | VAR | .0044 | .6400 | | | .6400 | .9196 | 1.0448 | |
| UNIVERSAL JOINT - INTER. SHAFT | 183642 | 1 | 1 | FRG | .1012 | .0541 | .4573 | .6618 | 1.1732 | 1.6859 | 1.9152 | 200.0 |
| NUT (M8-1.25) - UNIV. COUPLING | 183643 | 1 | 1 | HRS | .0154 | .0320 | | | .0320 | .0460 | .0523 | |
| ASSEMBLY COST | | | | | | .0299 | .1992 | .1681 | .3972 | .5708 | .6484 | 35.0 |

1983 TOYOTA TERCEL BOARD 6

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VEHICLE- 12- NISSAN SENTRA

| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | CONSUMER | TOOLING |
|------------------------------------|----------|-----|------|--------|----------|--------|--------|---------|---------|---------|----------|---------|
| | | | | | | | | | | | | |
| NISSAN SENTRA | | 1 | | 6.0825 | 7.2868 | 3.0766 | 3.7096 | 14.0730 | 20.2233 | 22.9742 | 11060.0 | |
| ASM - STEERING COLUMN JACKET | 83521 | 1 | ASSY | 1.0319 | .5646 | .5417 | .5362 | 1.6425 | 2.3603 | 2.6813 | 159.0 | |
| ASM - STEERING COLUMN MTG. BRACKET | 83541 | 1 | ASSY | .6098 | .2712 | .0753 | .0843 | .4308 | .6190 | .7032 | 140.0 | |
| ASM - STEERING SHAFT | 83601 | 1 | ASSY | 3.1952 | 4.0413 | 1.2105 | 1.5558 | 6.8076 | 9.7828 | 11.1135 | 408.0 | |
| ASM - INTERMEDIATE STEERING SHAFT | 83621 | 1 | ASSY | 1.2456 | 2.4077 | 1.2491 | 1.5333 | 5.1921 | 7.4612 | 8.4762 | 353.0 | |
| ASSEMBLY COST | | | | | | | | | | | | |

VEHICLE- 12- NISSAN SENTRA

| DESCRIPTION | ITEM NO. | QTY | MTRL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|-------------------------------|----------|-----|------|--------|-----------------------------|-------|--------|----------------------------|--------|--------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - STEERING COLUMN JACKET | 183521 | 1 | ASSY | 1.0319 | .5646 | .5417 | .5362 | 1.6425 | 2.3603 | 2.6813 | 159.0 |
| JACKET (HOUSING) - STRG. COL. | 183522 | 1 | STRG | 1.0242 | .4875 | .1455 | .1818 | .8148 | 1.1709 | 1.3301 | 70.0 |
| SPADER - STRG. COL. JACKET | 183527 | 1 | FLAS | .0077 | .0097 | .0398 | .0324 | .0812 | .1172 | .1332 | 72.0 |
| ASSEMBLY COST | | | | | .0674 | .3564 | .3220 | .7458 | 1.0717 | 1.2175 | 12.0 |

VEHICLE- 12- NISSAN SENTRA

| DESCRIPTION | ITEM NO. | QTY | MTRL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|------------------------------------|----------|-----|------|--------|-----------------------------|-------|--------|----------------------------|-------|-------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - STEERING COLUMN MTG. BRACKET | 183541 | 1 | ASSY | .6098 | .2712 | .0753 | .0843 | .4308 | .6190 | .7032 | 140.0 |
| BRACKET - STRG. COL. MTG. | 183542 | 1 | G/ST | .4359 | .1710 | .0196 | .0274 | .2180 | .3133 | .3559 | 75.0 |
| SPACER - STRG. COL. MTG. BRKT. | 183543 | 2 | HRS | .0290 | .0140 | .0070 | .0126 | .0336 | .0482 | .0548 | 10.0 |
| BOTTOM BRACKET - STRG. COL. MTG. | 183548 | 1 | G/ST | .1449 | .0855 | .0087 | .0185 | .1127 | .1619 | .1839 | 50.0 |
| ASSEMBLY COST | | | | | .0007 | .0400 | .0258 | .0665 | .0956 | .1086 | 5.0 |

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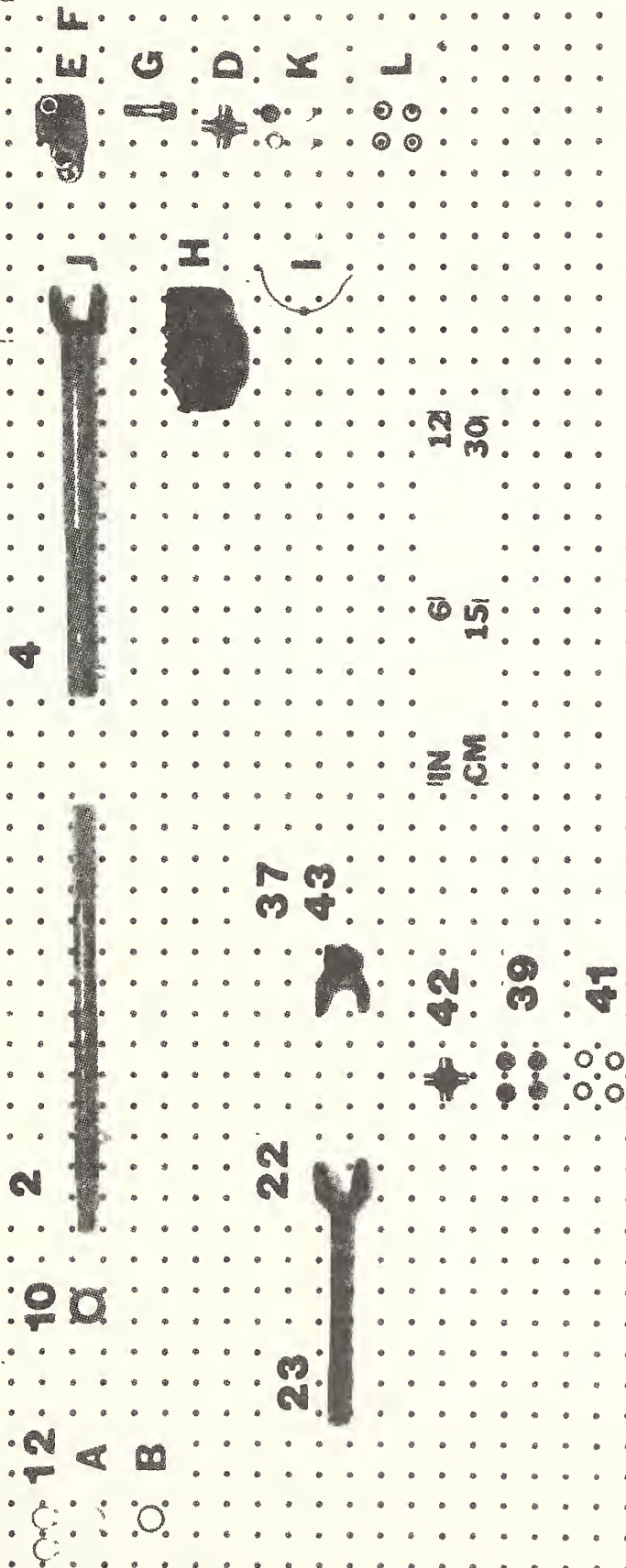
| DESCRIPTION | ITEM NO. | QTY | MATL | WEIGHT | VARIABLE MANUFACTURING COST | | | WHOLESALE CONSUMER TOOLING | | | |
|---------------------------------|----------|-----|------|--------|-----------------------------|--------|--------|----------------------------|--------|---------|-------|
| | | | | | MATERIAL | LABOR | BURDEN | TOTAL | PRICE | PRICE | PRICE |
| ASM - STEERING SHAFT | 183601 | 1 | ASSY | 3.1952 | 4.0413 | 1.2105 | 1.5558 | 6.8076 | 9.7828 | 11.1135 | 408.0 |
| SHAFT - UPPER - STRG. | 183602 | 1 | CRS | 1.2922 | .5079 | .1790 | .3594 | 1.0463 | 1.5035 | 1.7080 | 12.0 |
| SHAFT - LOWER - STRG. | 183604 | 1 | HRS | .9664 | .2979 | .0933 | .0962 | .4874 | .7004 | .7957 | 12.0 |
| BEARING | 183610 | 1 | STL | .0358 | .5500 | | | .5500 | .7904 | .8979 | |
| RETAINER RING | 183612 | 2 | STL | .0034 | .0800 | | | .0800 | .1150 | .1306 | |
| WASHER | 183612A | 1 | STL | .0092 | .0250 | | | .0250 | .0359 | .0408 | |
| SPRING WASHER | 183612B | 1 | STL | .0014 | .0500 | | | .0500 | .0719 | .0817 | |
| UNIVERSAL JOINT - STRG. SHAFT | 183612D | 1 | STF | .1012 | .0485 | .1916 | .3688 | .6089 | .8750 | .9940 | 85.0 |
| CLEVIS - STRG. SHAFT | 183612E | 1 | CRS | .3330 | .2536 | .1527 | .2034 | .6071 | .8761 | .9952 | 110.0 |
| NUT - UNIV. COUPLING | 183612F | 1 | STL | .0253 | .0400 | | | .0400 | .0575 | .0653 | |
| BOLT | 183612G | 1 | STL | .0685 | .0590 | | | .0590 | .0848 | .0963 | |
| BOOT - STRG. SHAFT | 183612H | 1 | RUB | .1306 | .3091 | | | .3091 | .4442 | .5046 | 60.0 |
| BOOT RETAINER | 183612I | 1 | PLAS | .0018 | .0500 | | | .0500 | .0719 | .0817 | |
| UNIVERSAL BRACKET - STRG. SHAFT | 183612J | 1 | HRS | .1648 | .0935 | .0200 | .0506 | .1641 | .2358 | .2679 | 85.0 |
| BEARING | 183612K | 4 | STL | .0576 | 1.0000 | | | 1.0000 | 1.4372 | 1.6328 | |
| BEARING SPACER | 183612L | 4 | RUB | .0040 | .6400 | | | .6400 | .9196 | 1.0448 | |
| ASSEMBLY COST | | | | | .0368 | .5739 | .4774 | 1.0881 | 1.5636 | 1.7762 | 44.0 |

VEHICLE- 12- NISSAN SENTRA

| DESCRIPTION | ITEM NO. | QTY | MATERIAL | WEIGHT | MATERIAL | LABOR | BURDEN | TOTAL | WHOLESALE | | CONSUMER | |
|-----------------------------------|----------|-----|----------|--------|----------|--------|--------|--------|-----------|--------|----------|-------|
| | | | | | | | | | PRICE | PRICE | PRICE | PRICE |
| ASM - INTERMEDIATE STEERING SHAFT | 83621 | 1 | ASSY | 1.2456 | 2.4097 | 1.2491 | 1.5333 | 5.1921 | 7.4612 | 8.4762 | 353.0 | |
| FLANGE - COUPLING UPPER | 83622 | 1 | HRS | .2103 | .1339 | .0452 | .0865 | .2656 | .3817 | .4336 | 35.0 | |
| SHAFT - STRG. COL. INTERMEDIATE | 83623 | 1 | STL | .6000 | .3184 | .4062 | .4162 | 1.1408 | 1.6393 | 1.8622 | 28.0 | |
| UNIVERSAL BRACKET | 83637 | 1 | HRS | .2567 | .2014 | .1412 | .2007 | .5433 | .7807 | .8869 | 55.0 | |
| BEARING | 83639 | 1 | VAR | .0576 | 1.0000 | | | 1.0000 | 1.4372 | 1.6328 | | |
| BEARING SPACER | 83641 | 1 | VAR | .0044 | .6400 | | | .6400 | .9196 | 1.0448 | | |
| UNIVERSAL JOINT - INTER. SHAFT | 83642 | 1 | FRG | .1012 | .0541 | .4573 | .6618 | 1.1732 | 1.6859 | 1.9152 | 200.0 | |
| NUT (M8-1.25) - UNIV. COUPLING | 83643 | 1 | HRS | .0154 | .0320 | | | .0320 | .0460 | .0523 | | |
| ASSEMBLY COST | | | | | .0299 | .1992 | .1681 | .3972 | .5708 | .6484 | 35.0 | |

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