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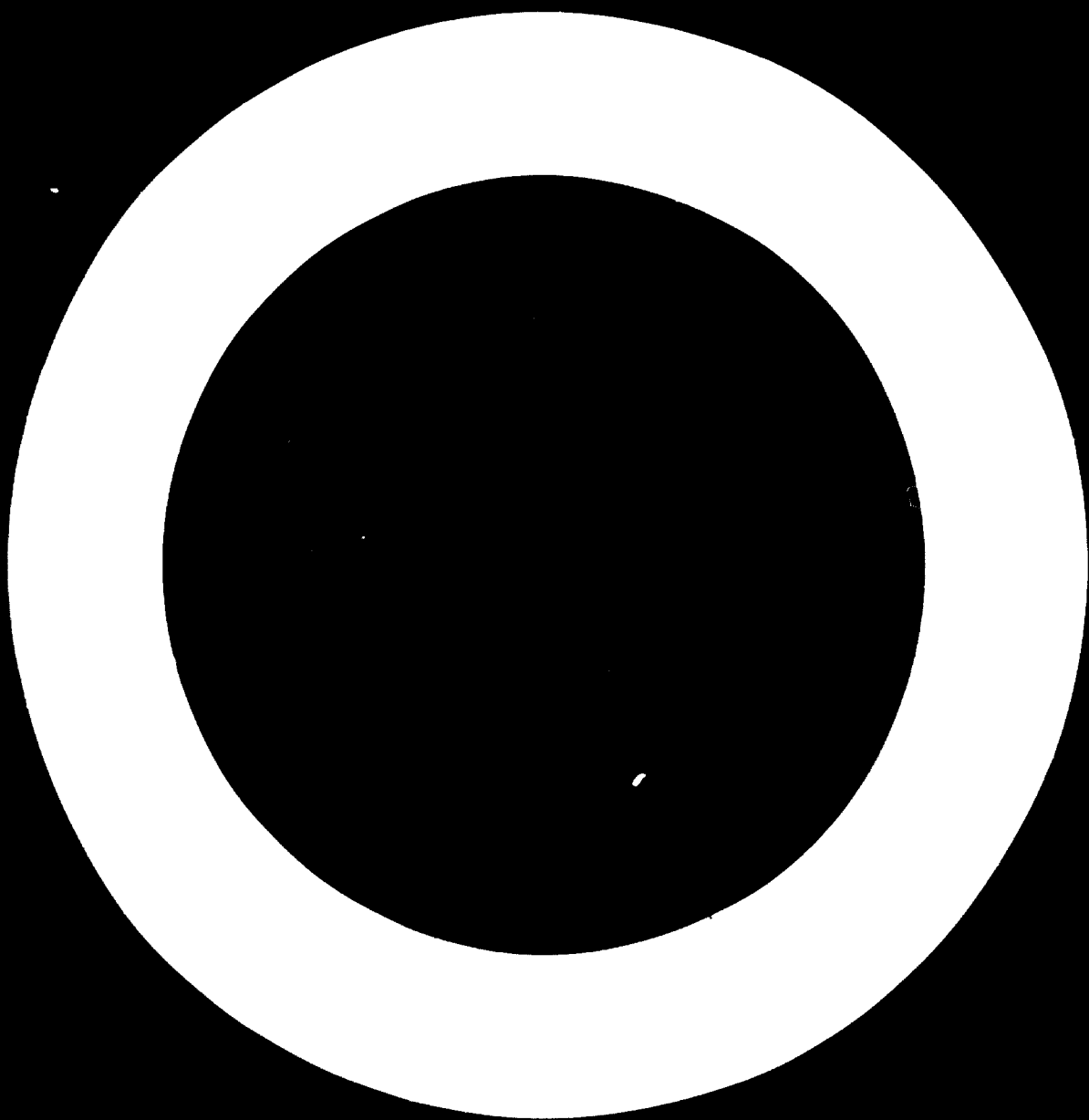
INFORMATION REGARDING THE
VENEZUELAN AUTOMOTIVE INDUSTRY^{1/}

by

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1 - DATA ON THE VERMONTIAN AUTOMOTIVE INDUSTRY

10 - SUMMARY OF AUTOMOTIVE UNITS IN VENEZUELA (Schedule Nº 1)

Schedule No 1

SUMMARY OF AUTOMOTIVE UNITS IN VENEZUELA

<u>YEAR</u>	<u>AUTOMOBILES AND SEASON WAGONS</u>	<u>COMMERCIAL VEHICLES</u>	<u>TOTAL UNITS</u>
1960	270,550	102,052	372,602
1961	267,293	104,590	371,813
1962	290,202	113,557	393,899
1963	296,000	129,597	415,197
1964	299,819	140,573	439,392
1965	303,117	136,864	439,971
1966	347,576	137,796	485,371
1967	304,006	150,945	515,611
1968	301,757	157,578	539,335
1969	309,048	164,211	563,059
1970	415,200	170,571	595,059
1971	403,080	177,477	610,507

Source: Ministry of Development
Office of Industries

As can be observed on Schedule N° 1, "Summary of Automotive Units in Venezuela", automotive unit classification is divided into two groups: passenger vehicles which include automobiles and station wagons, and commercial vehicles which comprise light and heavy trucks, auto-trucks (Pick Ups and Panels), rural type vehicles and buses.

Up to the present time, no segregation has been obtained of the referred to groups with regard to trade-mark, model and age of the units; which would result very beneficial in projecting the production of automotive parts destined for the spare parts market.

If the series of figures covering the period 1960-1971 were analyzed, it would be noted that there has been an increase of 38% in vehicle circulation in 1971 as compared to the year 1960.

11 - ANNUAL VEHICLE UNITS SALES (Schedule N° 2)

ANNUAL VEHICLE UNITS SALES

(1963-1971)

<u>YEAR</u>	<u>PASSENGER VEHICLES</u>	<u>COMMERCIAL VEHICLES</u>	<u>TOTAL</u>
1963	16,280	9,056	27,336
1964	22,224	10,271	32,505
1965	32,226	13,361	45,616
1966	39,367	16,954	56,341
1967	41,973	16,316	58,289
1968	42,777	16,626	59,403
1969	43,826	18,362	62,300
1970	48,943	18,926	67,869
1971	53,330	20,779	74,109
	55,831	21,191	77,022

Source: Information acquired from the firms.

12 - Trade-Marks and Models Assembled, Number, and Brief Description of Assembling Plants.

At present, there are fifteen (15) plants processing automotive vehicles in Venezuela, to wit:

a) C. A. Tecara

This firm produces rural type, four-wheel traction vehicles of the Japanese trade-mark TOYOTA.

The four (4) models it produces in the country are:

PJ-40-LV Canvas Top
PJ-40-LV Metal Top
PJ-45-LPB Pick Up
PJ-55-LV Station Wagon

The company's capital amounts to \$ 10,000,000 and it is totally national.

The firm does not have its own plant and for that reason it has contracted the assembling of its units to another firm in the same branch of the industry (Industria Venezolana de Maquinarias, C. A.).

b) Consorcio Inversorista Fabril, S. A. (CIF)

This firm produces automobiles, heavy trucks and buses of the German trade-mark MERCEDES BENZ.

The twenty (20) models it produces in the country are:

Automobiles:

200 Sedan Synchronesh Transmission
220 AH Sedan Automatic Transmission
220 D Sedan Synchronesh Transmission
230 Sedan Synchronesh Transmission
230 AH Sedan Automatic Transmission
260 Sedan Synchronesh Transmission
260 AH Sedan Automatic Transmission
250 CH Coupe Synchronesh Transmission

250 CAH Coupe Automatic Transmission
280 SH Sedan Synchronesh Transmission
280 SAH Sedan Automatic Transmission

Heavy Trucks:

L 1.113-51 Diesel Synchronesh Transmission
L 1.924-52 Diesel Synchronesh Transmission
LS 1.924-36 Diesel Synchronesh Transmission
LS 2.624-52 Diesel Synchronesh Transmission
LK 2.624-36 Diesel Synchronesh Transmission
LK 1.924-46 Diesel Synchronesh Transmission

Buses:

O-302 Diesel Synchronesh Transmission
O-317 Diesel Synchronesh Transmission
O-309-M-115 Synchronesh Transmission

The company's capital amounts to \$ 5,000,000 and it is totally national.

The firm has its own plant located at Barcelona (State of Anzoátegui) where it produces automobiles and buses. Their trucks are produced at Los Buices (State of Miranda).

c) Constructora Venezolana de Vehículos, C. A.

This firm produces automobiles of the French trade-mark RENAULT and automobiles and passenger station wagons of the Northamerican trade-mark RAMBLER.

The eleven (11) models it produces in the country are:

B-4 Sedan Synchronesh Transmission
B-12 Sedan Synchronesh Transmission
B-16 Sedan Synchronesh Transmission
B-16 Sedan Automatic Transmission
Hernet Sedan Synchronesh Transmission
Hernet Sedan Automatic Transmission
Hernet Coupe Automatic Transmission
Hernet Station Wagen Synchronesh Transmission
Hernet Station Wagen Automatic Transmission
Javelin Coupe Synchronesh Transmission
Javelin Coupe Automatic Transmission

The company's capital amounts to \$ 2,250,000 of which 75.5% is Venezuelan and 24.5% is foreign.

The firm has its own plant located at Mariara (State of Carabobo).

d) Chrysler de Venezuela, S. A.

This firm produces automobiles and passenger station wagons, light trucks, pick-ups, and bus chassis of the Northamerican trademarks DODGE and CHRYSLER.

The eighteen (18) models it produces in the country are:

Automobiles and Passenger Station Wagons:

Valiant Sedan Synchronesh Transmission
Valiant Sedan Automatic Transmission
Dart Sedan Automatic Transmission
Dart GT Coupe Automatic Transmission
Coronet Sedan Synchronesh Transmission
Coronet Sedan Automatic Transmission
Coronet Station Wagon Automatic Transmission
Charger RT Coupe Automatic Transmission
New Yorker Sedan Automatic Transmission

Carge Trucks and Pick-Ups:

D-100 Pick-Up Synchronesh Transmission
D-100 Pick-Up Automatic Transmission
W-200 Express Synchronesh Transmission
D-300 Express Synchronesh Transmission
D-300 Chassis Synchronesh Transmission
D-400 Chassis Synchronesh Transmission
D-500 Chassis Synchronesh Transmission
D-700 Chassis Synchronesh Transmission

Bus Chassis:

P-300 BC Synchronesh Transmission

The company's capital amounts to \$ 16,000,000 and is totally foreign.

The firm has its own plant located at Valencia (State of Carabobo).

a) Ensambladora Carabobo, S. A.

This firm produces rural type, four-wheel traction vehicles of the Japanese trade-mark NISSAN PATROL.

The five (5) models it produces in the country are:

L-60 Canvas Top
KL-60 Metal Top
KL-280 Chassis
LG-60 Canvas Top Pick-Up
LG-60 Metal Top Chassis

The company's capital amounts to Bs 4,000,000 and is totally national.

The firm has its own plant located at Valencia (State of Carabobo).

f) Ensamblaje de Carrocerías Valencia, S. R. L.

This firm produces bus chassis of the Northamerican trade-mark BLUE BIRD.

The two (2) models it produces in the country are:

All American Gasoline Synchronesh Transmission
All American Diesel Synchronesh Transmission

The company's capital amounts to Bs 900,000 and is totally national.

The firm has its own plant located at Valencia (State of Carabobo).

g) Fábrica Industrial Automotores Venezuela, C. A.

This firm produces automobiles and passenger station wagons, light and heavy trucks, and bus chassis of the Italian trade-marks

FIAT and GM.

The eighteen (18) models it produces in the country are:

Automobiles and Passenger Station Wagons:

126 Sedan Synchronesh Transmission
124 Sedan Synchronesh Transmission
124 Station Wagon Synchronesh Transmission
125 Sedan Synchronesh Transmission

Light Trucks:

616 N/2 Synchronesh Transmission
625 N/2 Synchronesh Transmission
Tigrette 55 N Synchronesh Transmission

Heavy Trucks:

619 N Synchronesh Transmission
619 T Synchronesh Transmission
662 N/3 Synchronesh Transmission
662 T/3 Synchronesh Transmission
668 N Synchronesh Transmission
668 T Synchronesh Transmission
Titane MSB Synchronesh Transmission
Titane MLSB Synchronesh Transmission
Titane 160 L Synchronesh Transmission

Bus Chassis:

643 E Synchronesh Transmission
303 S Synchronesh Transmission

The company's capital amounts to \$ 25,000,000 of which 60% is Venezuelan and 40% is foreign.

The firm has its own plant located at La Victoria (State of Aragua).

b) Ford Motor de Venezuela, S. A.

This firm produces automobiles and passenger station wagons, light trucks, Pick-Ups, and bus chassis of the Northamerican and English trade-mark FORD.

The thirty-two (32) models it produces in the country are:

Automobiles and Passenger Station Wagons:

Certina GXL Coupe Synchronesh Transmission
Certina L Sedan Synchronesh Transmission
Certina L Sedan Automatic Transmission
Certina Station Wagen Synchronesh Transmission
Certina Station Wagen Automatic Transmission
Maverick Coupe Synchronesh Transmission
Maverick Coupe Automatic Transmission
Maverick Sedan Synchronesh Transmission
Maverick Sedan Automatic Transmission
Fairlane Sedan Synchronesh Transmission
Fairlane Sedan Automatic Transmission
Fairlane 500 Sedan Automatic Transmission
Fairlane Station Wagen Automatic Transmission
Mustang Hardtop Coupe Synchronesh Transmission
Mustang Hardtop Coupe Automatic Transmission
Mustang Fastback Coupe Synchronesh Transmission
Mustang Fastback Coupe Automatic Transmission
Custom 500 Sedan Automatic Transmission
Galaxie 500 Sedan Automatic Transmission
L.T.D. Brougham Sedan Automatic Transmission
Country Sedan Station Wagen Automatic Transmission

Light Trucks and Cargo Pick-Ups:

F-100 Pick-Up Synchronesh Transmission
F-100 Pick-Up Automatic Transmission
F-350 Pick-Up Synchronesh Transmission
F-350 Chassis Synchronesh Transmission
F-500 Chassis Synchronesh Transmission
F-600 Chassis Synchronesh Transmission
F-750 Chassis Synchronesh Transmission

Bus Chassis:

B-350 Synchronesh Transmission
B-350 Automatic Transmission
B-600 Synchronesh Transmission
B-750 Synchronesh Transmission

The company's capital amounts to \$ 20,000,000 and is totally foreign.

The firm has its own plant located at Valencia (State of Carabobo).

1) General Motors de Venezuela, C. A.

This firm produces automobiles and passenger station wagons, light trucks and Pick-Ups, and chassis for buses of the Northamerican trade-marks CHEVROLET and BUICK, and of the German trade-mark OPEL.

The thirty (30) models it produces in the country are:

Automobiles and Passenger Station Wagons:

Chevy II Sedan Synchronesh Transmission
Chevy II Sedan Automatic Transmission
Chevelle Sedan Synchronesh Transmission
Chevelle Sedan Automatic Transmission
Chevelle Coupe Automatic Transmission
Chevelle Greenbrier Sta. Wagen Automatic Transmission
Camaro Coupe Synchronesh Transmission
Camaro Coupe Automatic Transmission
Biscayne Sedan Automatic Transmission
Caprice Sedan Automatic Transmission
Le Sabre Sedan Automatic Transmission
1.900 Sedan Synchronesh Transmission
1.900 Sedan Automatic Transmission
1.900 Coupe Synchronesh Transmission
1.900 Coupe Automatic Transmission
Rekord Caravan Station Wagen Synchronesh Transmission
Rekord Caravan Station Wagen Automatic Transmission

Light Trucks and Pick-Ups:

CS-10.704 Pick-Up Synchronesh Transmission
CS-10.704 Pick-Up Automatic Transmission
CS-10.734 Pick-Up Synchronesh Transmission
CS-10.734 Pick-Up Automatic Transmission
CS-20.906 Panel Synchronesh Transmission
CB-31.003 Chassis Synchronesh Transmission
CB-31.004 Pick-Up Synchronesh Transmission
CB-41.703 Chassis Synchronesh Transmission
CB-51.403 Chassis Synchronesh Transmission
CB-52.003 Chassis Synchronesh Transmission
CB-52.313 Chassis Synchronesh Transmission

Bus Chassis:

SB-52.802 Synchronesh Transmission

The company's capital amounts to \$ 5,000,000 and is totally foreign.

The firm has its own plant located at Caracas where it produces units corresponding to the Northamerican trade-marks. Those units corresponding to the German trade-mark are assembled by another firm in the same branch of the industry (Constructora Venezolana de Vehiculos, C. A.).

j) Industria Venezolana de Maquinarias, C. A.

This firm produces light trucks, Pick-Ups, heavy trucks, and bus chassis of the Northamerican trade-mark INTERNATIONAL.

The fourteen (14) models it produces in the country are:

Light Trucks and Pick-Ups:

1.010 Pick-Up Synchronesh Transmission
1.010 Pick-Up Automatic Transmission
1.010 Panel Synchronesh Transmission
1.310-D Chassis Synchronesh Transmission
1.700 Chassis Synchronesh Transmission
1.800 Chassis Synchronesh Transmission

Heavy Trucks:

1.750 Chassis Synchronesh Transmission
2.050 Chassis Synchronesh Transmission
F-2.050 Chassis Synchronesh Transmission
F-2.000 Chute Synchronesh Transmission
F-2.000 Chassis Synchronesh Transmission
F-230 Chute Synchronesh Transmission
F-230 Chassis Synchronesh Transmission

Bus Chassis:

1.700 Synchronesh Transmission

The company's capital amounts to \$ 4,000,000 of which 55% is Venezuelan and 45% is foreign.

The firm has its own plant located at Maracay (State of

Aragua).

k) Mack de Venezuela, C. A.

This firm produces rural type vehicles, heavy trucks, and bus chassis of the Northamerican trade-mark MACK and of the English trade-mark LAND-ROVER.

The seven (7) models it produces in the country are:

Rural Type Vehicles:

88" W.B. Canvas Top
109" W.B. Canvas Top
110" Pick-Up

Heavy Trucks:

B-400 Chassis Synchronesh Transmission
B-600 Chute Synchronesh Transmission
DE-600 Chassis Synchronesh Transmission

Bus Chassis:

B-600 Synchronesh Transmission

The company's capital amounts to Bs 2,500,000 of which 50% is Venezuelan and 50% is foreign.

The firm has its own plant located at Las Tejerías (State of Aragua).

l) Reptas Motors de Venezuela, S. A.

This firm produces automobiles and passenger station wagons of the English trade-mark HILLMAN.

The six (6) models it produces in the country are:

Arrow Sedan Synchronesh Transmission
Arrow Sedan Automatic Transmission
GT Sedan Synchronesh Transmission
FT Sedan Automatic Transmission
Hunter Station Wagon Synchronesh Transmission
Hunter Station Wagon Automatic Transmission

The company's capital amounts to \$ 4,000,000 and is totally foreign.

The firm does not have its own plant and for that reason its units are assembled locally by another firm in the same branch of the industry (Chrysler de Venezuela, S. A.).

m) Talleres Gage, C. A.

This firm produces bus chassis of the Northamerican trade-mark REO.

The two (2) models it produces in the Country are:

A-475 Ching Synchronesh Transmission
B-470-J Con Trompa Synchronesh Transmission

The company's capital amounts to \$ 1,500,000 and is totally national.

The firm has its own plant located at Caracas.

n) Volkswagen Interamericana, C. A.

This firm produces automobiles and passenger station wagons, cargo station wago and passenger transport vehicles of the German trade-mark VOLKSWAGEN.

The eleven (11) models it produces in the country are:

Automobiles and Passenger Station Wagons:

1.200 Sedan Synchronesh Transmission
1.300 Sedan Synchronesh Transmission
1.600 Sedan Synchronesh Transmission
1.600 Sedan Automatic Transmission
1.600 Variant Station Wagon Synchronesh Transmission
1.600 Variant Station Wagon Automatic Transmission
1.600 Fastback Synchronesh Transmission
1.600 Fastback Automatic Transmission

Cargo Station Wagons and Passenger Transport Vehicles:

211 Panel Synchronesh Transmission
215 Panel Synchronesh Transmission
Kombi Synchronesh Transmission

The company's capital amounts to Bs 18,000,000 and is totally national.

The firm has its own plant located at Morón (State of Carabobo).

e) Willys de Venezuela, S. A.

This firm produces rural type vehicles of the Northamerican trade-mark JEEP.

The ten (10) Models it produces in the country are:

CJ-Canvas Top
CJ-5 Metal Top
CJ-6 Canvas Top
CJ-6 Metal Top
C-101 Metal Top
J-4.800 Hutacas
J-4.800 Pick-Up
J-4.800 Hutacas
J-4.800 Pick-Up
J-100 Wagoneer

The company's capital amounts to Bs 1,000,000 and is totally foreign.

The firm has its own plant located at Las Tejerías (State of Aragua).

The models produced in the country, under the different categories of vehicles, amount to one hundred and ninety (190), distributed as follows:

<u>Categories</u>	<u>N°</u>
Automobiles and Passenger Station Wagons	87
Rural Type Vehicles	22
Commercial Vehicles weighing up to 4,000 Kgs. per unit	30
Commercial Vehicles weighing more than 4,000 Kgs. per unit	25
Bus Chassis	17
	<hr/>
Total	100
	<hr/> <hr/>

On Schedule N° 3, the Investment on Fixed Assets (Gross), for the period 1967-1971, is specified and on Schedule N° 4, the personnel employed by the Automotive Industry and salaries paid for the period 1968-1971 are shown.

INVESTMENTS IN GROSS FIXED ASSETS
(IN BOLIVARS)

F I R M S	1967	1968	1969	1970	1971
C. A. Pecuero	1,227,000	2,055,000	1,800,000	1,834,616	2,370,000
Citán, C. A.	662,500	675,300	675,000		
Comercio Inversiónista					
Faberil, S. A.	885,000	1,259,782	15,000,000	15,000,000	18,024,761
Constructora Venezolana de Vehículos	4,044,000	4,426,366	5,315,000	9,791,383	14,510,329
Chrysler de Venezuela, C. A.	50,764,361	66,164,519	47,267,530	49,470,280	51,320,017
Ensambladora Carrobo, C. A.	1,074,717	1,036,060	1,166,661	668,066	638,066
Ensamblaje Carrocerías					
Valencia, S. B. L.	984,408	1,237,767	1,229,393	1,256,536	1,465,770
Fábrica Industrial Automotrices Venezuela, C. A.	11,230,291	11,429,493	16,391,603	18,704,015	19,173,403
Ford Motor de Venezuela, S. A.	46,703,939	49,676,537	53,477,438	61,739,361	61,412,685
General Motors de Venezuela, C. A.	37,964,551	45,076,000	45,669,000	45,335,051	46,631,997
Industria Venezolana de Maquinarias, C. A.	2,686,449	2,814,827	3,029,000	3,294,079	3,844,746
Maest de Venezuela, C. A.	2,299,502	2,442,960	2,661,179	2,836,783	3,382,532
Reotas Motors de Venezuela, S. A.	13,540,886	13,437,422	12,977,806	13,090,336	7,239,800
Talleres Gage, C. A.	1,413,462	1,413,462	1,548,325	1,548,325	1,301,061
Volkswagen Interoceania, C. A.	14,000,000	14,400,000	15,345,000	16,625,621	18,386,279
Willlys de Venezuela, S. A.	1,536,000	1,709,000	2,066,000	2,216,524	2,217,243
TOTAL	192,966,261	219,293,226	225,671,335	244,032,696	251,966,601

Source: Information furnished by firms.

PERSONNEL EMPLOYED AND SALARIES PAID BY ADMINISTRATIVE VEHICLE MANUFACTURERS

1963 - 1971

<u>YEAR</u>	<u>LABORERS</u>	<u>DIRECTORS AND OFFICE PERSONNEL</u>	<u>TOTAL</u>	<u>(*) SALARIES AND WAGES PAID</u> <u>(In Thousands of Bolivares)</u>
1963	1,000	813	2,719	41,206
1964	2,004	900	3,200	59,863
1965	4,008	1,346	5,256	81,131
1966	4,014	1,572	5,686	91,967
1967	3,804	1,500	5,513	105,819
1968	4,308	1,635	5,878	112,972
1969	3,978	1,606	5,624	127,865
1970	4,408	1,767	6,225	136,832
1971	4,809	1,915	6,724	162,075

Source: Ministry of Development
Office of Industries

Notes: (*) Includes Salaries, Wages, Indemnities and Other Benefits.

13 - RELATED INDUSTRIES

The creation of firms to produce automotive items and accessories came about as a result of Governmental programs which were elaborated in order to incorporate nationally manufactured items to vehicles which only were being assembled in the country.

Until 1962, the only available items being incorporated to vehicles being assembled that year were: tires, tubes, paints, solvents and lacquers, oils and lubrication greases, safety plate glass and batteries.

Beginning in 1963, new firms began to be established in the country in order to be able to supply the automotive industry with nationally manufactured items, which in progressively increasing percentages were to be incorporated to vehicles being produced in the country.

At the present time, there are approximately two hundred (200) firms manufacturing automotive items and accessories in the country and these firms employ 10,250 persons. Altogether, these firms have a total investment in Fixed Assets of approximately \$ 296,000,000.

Some of the items being produced in the country are:

- Spring clamps, front suspension.
- Spring clamps, rear suspension.
- Exhaust system clamps.
- Fuel tank clamps and iron straps.
- Battery.
- Front Mats (vinyl, textiles and rubber).
- Trunk Mat (vinyl, textile and rubber).
- Rear Mat (vinyl, textile and rubber).
- Alternators.
- Front suspension shock absorber.
- Rear suspension shock absorber.

Manual antenna.
Door frames.
Spark plug harness.
Harness.
Seats.
Bands, blocks and segments for brakes.
Battery trays.
Mat bases.
Frames.
Rear seat bases.
Front seat bases.
Trailer bars.
Fifth tire frame.
Engine bases.
Engine assemblies.
Stabilizer bars, front suspension.
Trunk hinges.
Hood hinges.
Air pumps.
Coils.
Manual steering arm.
Spark plugs.
Spiral spring heads, front suspension.
Spiral spring heads, rear suspension.
Battery auxiliary cables.
Battery negative cables.
Battery positive cables.
Battery case and supports.
Wagon body.
Flat truck body.
Tire tubes.
Hood.
Fiber-glass hood.
Hoods (canvas, vinyl or plastic).
Cardboard lining for cabins.
Cardboard for spare tire.
Safety belts.
Spring hangers, rear suspension.
Condensers.
Differential assembly and rear semi-axle.
Rear lights assembly.
Electric horn and supports.
Fan belts.
Rear disk brakes, buckets.
Front brake, drums, buckets.
Rear brake disks.
Fuel tank cover.
Spring wedges, front suspension.
Spring wedges, rear suspension.
Wheel wedges.

Front defense or bumper grill.
Rear defense radiator grill.
Rear bumper defence.
Air deflector.
Door arm rest support.
Mechanical and lever jacks.
Generators.
Rubber butt, front suspension.
Greases.
Glove compartment.
Heat interchanger.
Automatic starter motor interrupter.
Frame stile.
Cabin laterals.
Hydraulic brake liquid.
Lubricants.
Wheel wrench.
Front manual glass lifter.
Rear manual glass lifter.
Lateral member of erected floor.
Starter motor or impulsor.
Motor or mechanism of windshield wiper.
Intake manifold.
Exhaust manifold.
Tires.
Floor of front panel.
Front mud guards.
Rear mud guards.
Front bumpers.
Rear bumpers.
Sound absorber paste.
Glues.
Paints, bases and solvents.
Contact points.
Baggage racks.
Front doors.
Radiators.
Radios.
Frame reinforcement.
Voltage regulator.
Spiral springs.
Adhesive and sealers.
Air conditioning system.
Muffler and sounders.
Exhaust system.
Brake drums.
Fuel tanks.
Air reserve tanks.
Wheel caps.

Fiber glass roof.
Metalic roof.
Screws, nuts and washers.
Frame creasrails.
Glass.
Steering wheel.

14 - LOCAL CONTENT PERCENTAGE, INCREASES AND CALCULATING SYSTEMS

The first Governmental program of incorporation of local parts was established in December 1962, by means of Resolutions covering the Automotive Industry whereby it was stipulated that aside from those products considered as of obligatory incorporation, 2% of the net dry weight of passenger vehicles and 1% of the net dry weight of commercial vehicles should be incorporated with locally manufactured parts, to the units being processed locally during the first semester of 1963, and that the above percentages were to be doubled on the second semester of that year.

Products of obligatory incorporation were: plate glass, tires and tire tubes, paints, solvents and lacquers, batteries, lubricant oils and greases; and these represented approximately 10% of the net dry weight of the vehicles.

Integration program goals were made progressive during the period 1964-1970, and by 1971 the percentage of the net dry weight of vehicles in the five existing categories reached the following percentages of the net dry weight of vehicles:

<u>Categories</u>	<u>1st Semester</u> <u>%</u>	<u>2nd Semester</u> <u>%</u>
Automobiles and passenger station wagons	43.0	43.5
Rural type vehicles	41.0	42.0
Commercial vehicles weighing up to 4,000 kilograms per unit	42.0	43.0
Commercial vehicles weighing over 4,000 kilograms per unit	29.0	30.0
Bus chassis	23.5	24.0

Beginning with the year 1972, the national incorporation grade is to be calculated with regard to the average incorporation percentage of weight and value of each unit.

Incorporation increases corresponding to the years 1972, 1973, 1974 and 1975, for the different vehicle categories with reference to their average incorporation percentage by weight and value for the year 1970, are the following:

<u>Categories</u>	<u>Incorporation Increases with Respect to 1970, by Percentages</u>			
	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>
Automobiles and passenger station wagons	25	50	90	150
Rural type vehicles	25	50	80	100
Commercial vehicles weighing up to 4,000 kilograms per unit	25	50	80	100
Commercial vehicles weighing over 4,000 kilograms per unit	4	10	15	25
Bus chassis	4	10	15	25

The weight-value incorporation bases for 1970, used in calculating integration goals, established in Resolution N° 5133 dated 9-29-71, are the following:

<u>Categories</u>	<u>Percentages</u>
Automobiles and passenger station wagons	10.0%
Rural type vehicles	10.0%
Commercial vehicles weighing up to 4,000 kilograms per unit	10.0%
Commercial vehicles weighing over 4,000 kilograms per unit	3.0%
Bus chassis	4.0%

The incorporation percentage is calculated as follows:

The summing up of the reference weight of each of the accepted as incorporable automotive parts and related assembled units, by the summing up of the reference value of each automotive part and related assembled unit (previously adjusted to the national manufacturing grade), divided between the product of the net dry weight of the original model in the country of origin, expressed in kilograms, and the price of same assembled unit on distributor basis, after deducting taxes paid in the country of origin, expressed in belivers. The resulting amount is then multiplied by 100.

Consequently, incorporation goals for the different vehicle categories for the years 1972, 1973, 1974 and 1975 are the following:

1. Automobiles and Passenger Station Wagons

Incorporation Base 10%

<u>Year</u>	<u>Incorporation Percentage</u> <u>Weight - Value</u>
1972	12.5
1973	15.0
1974	18.0
1975	25.0

2. Rural Type Vehicles and Commercial Vehicles Weighing up to 4,000 Kilograms

Incorporation Base 10%

<u>Year</u>	<u>Incorporation Percentage</u> <u>Weight - Value</u>
1972	12.5
1973	15.0
1974	18.0
1975	20.0

3. Commercial Vehicles Weighing Over 4,000 Kilograms

Incorporation Base 3.6%

<u>Year</u>	<u>Incorporation Percentage Weight - Value</u>
1972	3.74
1973	3.96
1974	4.14
1975	9.50

4. Bus Chassis

<u>Year</u>	<u>Incorporation Percentage Weight - Value</u>
1972	4.16
1973	4.40
1974	4.60
1975	5.00

To be taken into account, in the national incorporation program will be the local manufacturing grades of automotive parts and related assembled units, of which two stages are to be considered, as follows:

1. Assembly stage only. In this case, the national manufacturing grade will be that corresponding to the summing up of labor costs plus equipment depreciation.
2. Assembly stage with the incorporation of nationally manufactured parts. The national manufacturing grade will be that corresponding to the summing up of labor cost percentages, depreciation of equipment and the national component of incorporated parts.

$$\frac{\text{FOB Value of locally incorporated parts} \times 100}{\text{FOB Value of the totally erected assembly}} = \% \text{ materials (of the corresponding model)}$$

Automotive parts and related assembled units, being processed in the country at present, are grouped into twenty-five industrial models, which will determine their national manufacturing grade, in accordance with the scale established in Article 24 of Resolution N° 4624 dated 9-1-70, thus:

From 0 to 20% = 0

From 21 to 35% = 30%

From 36 to 49% = 50%

From 50% and over = 100%

15 - BRIEF DESCRIPTION OF THE LEGISLATION APPLICABLE TO THE AUTOMOTIVE
INDUSTRY.

Ministry of Development's Resolution N° 4,624 dated 9-10-70 is the one which at present governs activities of the aforementioned industry. Its regulations are grouped in various chapters, as follows:

CHAPTER I

In this chapter, a series of definitions are established in order to unify criterions of interpretation on the following: Vehicle categories, C.K.D., firm manufacturing automotive parts and related assembled units, vehicle manufacturing company, assembled automotive units, locally assembled automotive units, grade of local manufacture, trademark, model, reference weight, net dry weight of original model of vehicle, locally-made parts, part or assembled unit to be incorporated, part or accessory, original model, basic type, reference value of automotive parts, related assembled units and changeable parts.

CHAPTER II

This chapter covers programs to be incorporated and contemplates the following:

- 1) Importation licenses will be granted only, to vehicle manufacturing companies, for automotive parts and related assembled units, and for original models of the trademarks and categories indicated therein.
- 2) Granting of the aforementioned licenses to vehicle manufacturing companies is subject to their compliance with stipulated programs as specified in this chapter.

- 3) Vehicle producing companies will be allowed to partially cover their programmed goal by exporting automotive parts and locally assembled related units which they produce.
- 4) Vehicle manufacturing companies must submit, to the Ministry of Development, within ninety days following the publication of the respective Resolution, production forecasts relative to 1971 and within one-hundred and eighty days after, those for the years 1972, 1973, 1974 and 1975.
- 5) Vehicle manufacturing companies must submit, to the Ministry of Development, a breakdown of automotive parts and related assembled units of each type of original models programmed for production, indicating the following:
 - a) Description of automotive parts and related assembled units.
 - b) Reference weight of automotive parts and related assembled units and other items, and their percentage with relation to the total net dry weight of the corresponding original model.
 - c) Reference value of automotive parts, related assembled units and other items, and their percentage with relation to the total value of automotive parts, related assembled units and other items of the corresponding original model.
 - d) The net dry weight of the original model in the country of origin expressed in kilograms.
 - e) The price of the assembled vehicle, at distributor's price in the country of origin, expressed in bolivares, excluding taxes.

Ministry of Development will issue price lists and reference weight lists which are to include the following conditions:

- a) The total weight of automotive parts, assembled units and other items of the vehicle cannot be higher than the net dry weight of the corresponding original model. The proportion between weights of the different parts should be the same as that existing in the country of origin.
- b) Total value of the automotive parts, related assembled units and other items of the vehicle should be the same as the selling price to the distributor in the country of origin, of the same assembled vehicle. The proportion between values of the different parts should be the same as that existing in the country of origin.
- 6) The total sum of the reference weight of each of the automotive parts and related assembled units accepted as incorporable parts should be multiplied by the total sum of the reference value of each one of the aforementioned automotive parts and related assembled units, previously adjusted to local manufacturing grade. This amount is to be divided between the result of multiplying the net dry weight of the corresponding original model in the country of origin, expressed in kilograms, by the price of same, assembled and on distributor's basis, after deducting duties imposed in the country of origin, expressed in belivars. The resulting figure, multiplied by one hundred (100) will give the percentage for incorporation.
- 7) Prior to the 15th of February of each year, vehicle manufacturing companies must submit to the Ministry of Development an incorporation re-

part corresponding to the previous year.

- 8) Vehicle manufacturing companies that have reached incorporation goals established by the Ministry of Development, and have presented breakdowns of automotive parts and related assembled units, will be granted licenses to import automotive parts and related assembled units to be used in assembling vehicles in the country.
- 9) It will be considered that a company is not abiding with established regulations when:
 - a) It does not attain the minimum incorporation goals established for each category.
 - b) Even if it were to attain the established incorporation goals set for a given year, if it has balances left over as a result of non-attainment of incorporation goals set forth in previous years.
- 10) Automotive vehicle manufacturers that are found to be non-abiding with established regulations, will be given set importation quota for automotive parts and related assembled units required by said manufacturer on the year following the year of non-fulfillment.
- 11) The quota stipulated in the first case of nonfulfillment will be equal to the number of automotive units sold by the company during the period of nonfulfillment, less five percent (5%) for each one per thousandth (1‰) difference between the established goal and the actual incorporation percentage arrived at by the company during said period, deducting from the quota, stocks of assembled vehicles, unassembled vehicles, or balances of unexpired licenses; and, in the second case,

it will be equal to the number of vehicles sold by the company during the year of nonfulfillment, less five percent (5%) for each one per thousandth (1‰) difference between the established goal for this year and the actual incorporation percentage arrived at by the company during said period, to be calculated once incorporation shortages from previous periods have been deducted from this year's incorporated amount. Also to be deducted will be the above-mentioned vehicle stocks as well as the balances of unexpired licenses.

12) Not to be considered as incorporable, to the programs established, are those automotive parts or related assembled units made in Venezuela containing one or various of the following characteristics:

- a) These acquired by vehicle manufacturing companies for the national spare parts market.
- b) These produced by automotive parts and related assembled units manufacturers that have not been previously registered and authorized by the Office of Industries of the Ministry of Development.
- c) These that have not been produced in accordance with quality standards established by the "Comision Venezolana de Normas Industriales" (COVENIN) and are not utilizing the trademark "NOVEN".
- d) These produced by companies owned by one or various vehicle manufacturing companies, without said ownership being previously approved by the Ministry of Development.

13) When the grade of incorporable nationally manufactured automotive parts

or related assembled units is less than 50% of its value, it will be computed in the following proportions:

From 0 to 20% = Zero
From 21 to 35% = 30%
From 36 to 49% = 50%

- 14) Automotivs parts and related assembled units manufacturing companies, installed in the country, should obtain previous certification from the Ministry of Development proving that said products are computable in the incorporation programs.

CHAPTER III

This chapter refers to quality and price controls and establishes the following:

- 1) Automotivs and related assembled units destined to be incorporated as original equipment for vehicles assembled in the country and which supply the spare parts and export markets should be manufactured in an equal or superior quality to norms established by the "Comisión Venezolana de Normas Industriales" (COVENIN).
- 2) Obligatory incorporation will be applied to those automotive parts and related assembled units fulfilling quality standards established by COVENIN, which are available in sufficient quantity to cover original and spare parts markets and whose price level is in accord with the reference value established in the corresponding breakdowns, as shown below:

<u>Year</u>	<u>Excess Over Reference Value</u> <u>(Percentage)</u>
1972	44
1973	37
1974	30
1975	25

- 4 -
- 3) The manufacture of parts and related assembled automotive units will be subject to a program of progressive incorporation of national raw materials and its local manufacturing grade will be determined by the corresponding formula elaborated by the Ministry of Development.
 - 4) Forty-five days prior to presentation date in the local market, vehicle manufacturing companies must submit to the Ministry of Development, for its consideration, vehicle changes and proposed cash selling price to the distributor and to the public.
 - 5) During the first ninety days of each year, vehicle and automotive parts and related assembled units manufacturing companies must submit to the Ministry of Development their production and marketing cost sheets corresponding to vehicle models and to automotive parts and related assembled units manufactured during the previous year, specifying every element of the cost. Likewise, the vehicle distributing companies must submit, during the same period, proposed cash selling prices to the public, and fleet prices of each vehicle model they distribute.
 - 6) Vehicle and automotive parts and related assembled units manufacturing companies must present to the Ministry of Development, within sixty days after finalising its fiscal year, a Balance Sheet, a Profit and Loss Statement, and a Cost Statement of Items Manufactured and Sold.
 - 7) In case a vehicle or automotive parts and related assembled units manufacturing company fails to submit the information required, within the period indicated, granting of importation licenses, exonerations of customs duties and supplier's certificates will be suspended until

the Ministry of Development receive the respective information.

CHAPTER IV

This chapter refers to new investments and production programs and it stipulates that:

- 1) The Ministry of Development will analyze projects for the manufacturing of automotive parts and related assembled units, giving preference to those projects which generate greater additional value in the country, which supply the greatest number of vehicle manufacturing companies and whose cost levels permit exportations.
- 2) The Ministry of Development will favor uniformity and interchangeability of automotive parts and related assembled units in order to facilitate accomplishment of integration goals, taking advantage of scaling economies and reduced operation costs.
- 3) Automotive parts and related assembled units being manufactured in the country at present should continue being produced by those companies wherein vehicle manufacturing companies do not own shares. These may, however, present automotive parts and related assembled units projects in which their production will involve specialized foundry processes, mechanical processes, swages, heavy forging and the manufacturing of controls and instruments.
- 4) The Ministry of Development will not authorize the manufacture of new vehicle models in the country nor the substitution of those being produced except when the model is substituted in the country of origin by another, and that a vehicle manufacturing company produces just one basic type of vehicle of one or various models and it be substituted

in the country of origin by another model having radically different characteristics.

- 5) When the production of one or more vehicle models in Category 1, during any year, is lower than 2% of the total production of said category during the previous year, it cannot be continued to be produced. In case the model design does not vary in 1972 and 1973, it may continue to be produced without attaining the above-mentioned percentage provided that as a minimum 1% of total production of said category is manufactured annually. Likewise, with reference to Category 2 models, these cannot be continued to be produced when vehicle production is lower than 3% of the total production for said category in 1972 and 1973.
- 6) Limitations for 1974 and 1975 will be established on basis of the production for 1972.
- 7) A contest will be held for the manufacturing of a vehicle model which will combine technical and economical characteristics required for taxi service; a model whose production and sales conditions will permit an adequate price compatible with purchasing capability of low-income persons; and a model which will adequately fill Government ordinary service requirements.

Of these three models, the only contest held was the one relative to a vehicle for low-income persons. The aforementioned contest took place in 1971 having come out as winners the vehicle manufacturing firms "Constructora Venezolana de Vehículos, C. A." with its model "Renault 4" and "Volkswagen Interamericana, C. A." with its simplified version

of its "Volkswagen 1200" model. Both vehicles were released for marketing on April 1st of the present year.

Resolution N° 5133, dated September 29, 1971, establishes bases for calculating incorporation goals relative to weight and value for the years 1972, 1973, 1974 and 1975.

Resolution N° 5872, dated November 23, 1971, establishes 25 industrial models which cover automotive parts and related assembled units produced in the country, for the purpose of calculating the respective national manufacturing grade.

Resolution N° 4374, dated September 25, 1972, establishes maximum reference prices of automotive parts and related assembled units, in relation to the reference value of the vehicle in the country of origin, or to the reference weight of automotive parts and related assembled units, likewise in the country of origin.

16 - DESCRIPTION OF THE LEVEL OF INDUSTRIALIZATION, RELEVANT TO THE
AUTOMOTIVE INDUSTRY.

At present, it can be said that Venezuela has surpassed the first phase of industrial development. At first, Venezuelan economy depended solely on petroleum exploitation and on some agricultural products. In 1959, incentive programs were initiated for installation of industries in the country for the purpose of substituting importations. Today, the majority of items which were originally imported, are now being manufactured in the country. With regard to the automotive industry, it can be said that all vehicles for sale in the country are manufactured locally. The only vehicles imported are some commercial types with special equipment.

2 - TYPE OF COOPERATION BETWEEN VENEZUELAN PLANTS AND INTERNATIONAL COMPANIES

20 - DESCRIPTION OF COOPERATION AGREEMENTS AND LICENSES

Being that the Venezuelan tax system does not object to profits being transmitted out of the country, from branch offices of foreign companies or of mixed capital (Venezuelan and foreign) and that the present income tax law sets a lesser tax on these profits than it does on royalties, the majority of foreign firms having total or partial ownership in companies established in Venezuela prefer to pay tax on profits obtained.

For the above reason the signing of cooperation contracts or of licenses has not been generalised. Companies that have accepted, pay a certain percentage on their total annual product sales, which

vary between 3 and 5% of total sales. Generally, this occurs when foreign companies only grant the license and do not participate in the investment.

It is necessary to bring out the fact that in the beginning the home offices of companies operating in Venezuela rendered their branch offices, their partners, and those firms with licenses, all the technical assistance required for the installation and operation of their plants, as well as the quality control of products manufactured. This was accomplished by furnishing specialized personnel, the required manufacturing techniques and quality control of locally manufactured products in their own laboratories.

21 - DESCRIPTION OF AGREEMENTS FOR SUB-CONTRACTORS, IF APPLICABLE

None to date.

22 - QUANTITY, TYPE OF AUTOMOTIVE PARTS AND ASSEMBLED VEHICLES EXPORTED

220 - Exportation of Automotive Parts and Related Assembled units

Schedules 5, 6, 7 & 8 list automotive parts and related assembled units exported during 1968, 1969, 1970 and 1971 indicating the type of part, quantity per type, exporting company and country of destination.

With regards exportation of frames to Chile and Argentina by General Motors de Venezuela, C. A., attached is report presented by said company at Santiago, Chile, in September 1970.

These negotiations have continued during the present year and it is expected that before the end of the year, 1,000 more frames will be exported to Argentina.

INDUSTRIES OF ARTISANAL PAPERS AND RELATED ASSEMBLED UNITS

1982

<u>FIRM AND PRODUCTS</u>	<u>UNITS</u>	<u>KILOGRAMS</u>	<u>COST AT THE PLANT</u> (In Bolivares)	<u>COUNTRY</u>
<u>General Motors de Venezuela, C. A.</u>				
Bumpers	96	204	4,502	Maricao
Spiral Springs	90	400	2,010	Maricao
Glass	120	1,200	10,000	Maricao
Total		2,110	20,170	

Source: Ministry of Development
Office of Industries

IMPORTATIONS OF AUTOMOTIVE PARTS AND RELATED ASSEMBLED UNITS

1992

<u>FIRM AND PRODUCTS</u>	<u>UNITS</u>	<u>KILOGRAMS</u>	<u>COST AT THE PLANT (IN BOLIVIANS)</u>	<u>COUNTRY</u>
<u>General Motors de Venezuela, C. A.</u>				
Sealed and Chrome-Plated Bumpers	192	916	2,817	Mexico
Chrome-Plated Bumpers	2,328	11,053	372,173	Chile
Primes	744	38,888	70,823	Chile
<u>Chrysler de Venezuela, S. A.</u>				
Exhaust Systems	332	4,905	20,617	Colombia
Gasoline Tanks	332	3,342	30,597	Colombia
Glass	324	3,823	40,989	Colombia
Total		62,787	537,873	

Source: Ministry of Development
Office of Industries

EXPORTATIONS OF AUTOMOTIVE PARTS AND RELATED ASSEMBLED UNITS

1970

<u>FIRMS AND PRODUCTS</u>	<u>UNITS</u>	<u>KILOGRAMS</u>	<u>COST AT THE PLANT</u> (IN BOLIVARS)	<u>COUNTRY</u>
<u>General Motors de Venezuela, C. A.</u>				
Frames	720	36,960	81,176	Chile
Wheels	5,400	45,699	127,442	Chile
Spiral Springs	10,430	44,250	211,676	Mexico
Bumpers	4,668	10,769	93,827	Mexico
Brake Drums	720	7,490	47,660	Chile
<u>Chrysler de Venezuela, S. A.</u>				
Shock Absorber Supports	22,352	27,649	143,047	Mexico
Lifting Jack Components	12,963	9,380	72,196	Mexico
Radiators	660	12,852	167,711	Mexico
Ventilator Inductors	870	1,653	12,811	Mexico
Bumper Supports	15,928	33,822	96,578	Mexico
Rear Windshield Glass	3,288	27,393	300,884	Mexico
Windshields	324	3,532	49,989	Colombia
Radiators	400	4,368	84,870	U. S. A.
<u>Boetes Motors de Venezuela, S. A.</u>				
Radiators	260	5,200	63,020	Mexico
Shock Absorber Supports	5,200	7,580	28,224	Mexico
Glass	17,094	30,274	197,838	England
Ventilator Inductors	150	285	2,228	Mexico
Bumper Supports	3,200	4,976	19,080	Mexico
Glass	864	6,960	71,263	Mexico
Total		321,092	1,870,519	

Source: Ministry of Development
Office of Industries

EXPORTATIONS OF AUTOMOTIVE PARTS AND RELATED ASSEMBLED UNITS

1971

FIRMS AND PRODUCTS	UNITS	KILOGRAMS	COST AT		COUNTRY
			THE PLANT	(IN BOLIVARS)	
<u>General Motors de Venezuela, C. A.</u>					
Bumpers	12,869	24,432		157,245	Mexico
Frame Assemblies	91,054	440,786		1,565,870	Mexico
Frame Assemblies	197,055	255,587		616,939	Argentina
Spiral Springs	64,269	287,990		844,840	Mexico
Lifting Jack Components	7,799	14,219		37,749	Mexico
Nuts	227,500	4,777		28,745	Mexico
<u>Chrysler de Venezuela, S. A.</u>					
Bumper Supports	21,533	33,949		130,180	Mexico
Shock Absorber Supports	8,100	12,302		45,477	Mexico
Radiators	250	5,000		65,223	Mexico
Glass	352	5,260		17,599	Porto Rico
Ventilator Inductors	240	432		3,564	Mexico
Glass	578	7,860		72,406	Mexico
<u>Rootes Motors de Venezuela, S. A.</u>					
Radiators	450	9,000		119,678	Mexico
Shock Absorber Supports	8,733	11,874		52,322	Mexico
Ventilator Inductors	110	183		1,634	Mexico
Bumper Supports	27,861	43,465		166,662	Mexico
Glass	14,670	16,660		33,516	Porto Rico
TOTAL		1,203,796		3,959,649	

Source: Ministry of Development
Office of Industries

221 - Exportation of Assembled Vehicles

With regard to exportations of assembled vehicles, the only exporting firm was MACK de Venezuela, C. A., exporting 8 trucks, model MACK DM-815, to Brazil and 1 model R-403-X to Nicaragua during 1970.

3 - SPECIAL REQUIREMENTS FOR CARRYING OUT COOPERATION BETWEEN VENEZUELAN PLANTS AND FOREIGN COMPANIES

30 - INVESTMENTS

Investments by foreign companies are usually made in machinery and equipment as well as in technical assistance and in some cases in raw materials which have to be imported for processing in the country.

Schedule N° 9 indicates automotive vehicle manufacturers' company capital and percentage ownership. Schedule N° 3 indicates gross investment by said companies for the years 1965-1971.

As can be observed N° 10 indicates that automotive parts and other related assembled units manufacturers analysed during 1971, altogether had a net investment in fixed assets of Bs 296,005,821 and that Bs 152,788,365 were paid in salaries and wages.

31 - PRODUCTION QUALITY

In the beginning, a series of problems came about regarding the quality of parts manufactured in Venezuela in spite of the assistance rendered to manufacturing companies by their own technicians, as well as by vehicle manufacturing firms.

For that reason, in order to comply with the integration goal,

AUTOMOTIVE VEHICLE MANUFACTURERS' COMPANY CAPITAL

<u>F I E M S</u>	<u>COMPANY CAPITAL</u> (In Bolivers)	<u>OWNERSHIP</u>
C. A. Tecera	10,000,000	100% Venezuelan
Comercio Inversinista Fabril, S. A. "CIF"	5,000,000	100% Venezuelan
Constructora Venezolana de Vehiculos, C. A.	2,250,000	76.5% Venezuelan 24.5% Foreign
Chrysler de Venezuela, S. A.	16,000,000	100% Foreign
Ensambladora Carabebe, C. A.	4,000,000	100% Venezuelan
Ensamblaje de Carrocerías Valencia, S. R. L.	900,000	100% Venezuelan
Fábrica Industrial Automotores Venezuela, C. A.	26,000,000	60% Venezuelan 40% Foreign
Ford Motor de Venezuela, S. A.	20,000,000	100% Foreign
General Motors de Venezuela, C. A.	5,000,000	100% Foreign
Industria Venezolana de Maquinarias, C. A.	4,000,000	56% Venezuelan 44% Foreign
Mack de Venezuela, C. A.	2,500,000	50% Venezuelan 50% Foreign
Roots Motors de Venezuela, S. A.	4,000,000	100% Foreign
Talleres Gago, C. A.	1,500,000	100% Venezuelan
Volkswagen Interamericana, C. A.	16,000,000	100% Venezuelan
Williys de Venezuela, S. A.	1,800,000	100% Foreign

Source: Information furnished by the firms.

NET INVESTMENT AND PERSONNEL EMPLOYED
BY AUTOMOTIVE PARTS AND RELATED ASSEMBLED UNIT MANUFACTURERS

<u>CATEGORIES (1)</u>	<u>1971</u>			<u>NET INVESTMENT</u> <u>(IN BOLIVARS)</u>
	<u>FIRMS</u>	<u>PERSONNEL</u>	<u>SALARIES & WAGES PAID</u> <u>(IN BOLIVARS)</u>	
I	26	6,188	89,195,166	147,775,628
II	31	2,199	42,522,589	103,965,535
III	37	1,168	14,090,196	29,460,603
IV	57	704	6,980,414	14,804,055
TOTAL	151(2)	10,259	152,788,365	296,005,821

Source: Information furnished by the firms.

Note: (1) The automotive parts and related assembled unit manufacturing firms were divided into categories in accordance with the number of persons employed.

Category I - From 100 persons and over.

Category II - From 51 to 100 persons.

Category III - From 21 to 50 persons.

Category IV - From 5 to 20 persons.

(2) Only 151 firms are shown because sales from 41 firms to vehicle manufacturers were insignificant.

products being incorporated in vehicles had to be forwarded, in each case, to the home offices for control of specified quality and if said specification was in accord, approval for integration was granted.

At present, the majority of parts incorporated in vehicles are produced of satisfactory quality, which are verified in established laboratories in the country. Only those exceptional parts are being submitted to the home offices for revision and approval to incorporate in vehicles.

It can be observed that products bearing a well-known foreign trademark turn out to be of better quality than those not bearing any. Likewise, products manufactured to cover requirements of original equipment, turn out to be of better quality than when manufactured for the spare-parts market.

The quality of vehicles manufactured in the country has greatly improved.

32 - PRODUCTION COSTS AND ITS COMPARISON WITH THOSE OF INDUSTRIALIZED COUNTRIES

Production costs of automotive parts and related assembled units manufactured in the country are superior to their equivalent in countries where the home offices are located, due, mainly, to the fact that production volumes are lower than that of those countries turning out mass production exceeding two million units per year.

It is estimated that locally manufactured parts have an excess

cost of 125% in comparison with similar imported parts. This data was obtained from weighed average taken from different existing levels of the approximate 200 parts produced in the country.

33 - DELIVERY DATE COMPLIANCE

With reference to compliance of delivery date, it can be said that fulfillments are effected within the period stipulated in the purchase order.

When integration programs were initiated many cases of non-fulfillment of delivery date occurred. These delays caused severe problems to vehicle manufacturing plants. Fortunately, compliances with material delivery dates have been normalized.

**GENERAL MOTORS DE VENEZUELA INTERCHANGE OF AUTOMOTIVE
PARTS BETWEEN CHILE, ARGENTINA AND VENEZUELA**

**A case study prepared for the meeting of the Working Group
on Economies of Scale in the Latin American Automotive Industry.**

**Organized jointly by the Economic Commission for Latin America
(ECLA) and the InterAmerican Development Bank (IDB) with the
collaboration of the United Nations Industrial Development
Organization (UNIDO), Santiago, Chile, 21 to 30 September, 1970.**

To be presented by:

**Miguel J. Betz
Forward Planning Manager
General Motors de Venezuela**

August 11, 1970

Introduction

The Treaty of Montevideo posed a challenge not only to the signatory countries and its peoples but also to private investment, especially foreign private investment, to work towards the goal of a unified Latin American market.

General Motors, consistent with its policy of corporate responsibility, has accepted the challenge.

This presentation describes some of General Motors' efforts to promote LAFTA interchange programs within the automotive industry.

As a specific case study, we present today a brief review of an interchange program involving GM de Venezuela, GM Argentina and GM Chile, under which Chevrolet frames made in Venezuela are traded for other automotive parts made in Argentina and Chile.

GM Operations in Latin America

GM has three manufacturing plants and four assembly plants in Latin America, operating through locally organized subsidiary companies.

The manufacturing facilities are located in Argentina, Brazil, and Mexico.

The assembly facilities are located in Chile, Peru, Uruguay and Venezuela.

Sales and service of General Motors products in the other countries of Latin America are the responsibility of General Motors Overseas Distributors Corporation which sells to franchised distributors, including three assembler-distributors.

In general, GM's Latin American automotive product line consists mainly of Chevrolet and Opel passenger cars and Chevrolet commercial vehicles, trucks and bus chassis.

Local Content Regulations

To encourage industrialization and in an effort to improve adverse balance of payments accounts, Latin American governments have imposed local content requirements for vehicles manufactured or assembled in their respective countries.

The percent of local parts that must be integrated into the vehicle varies from country to country according to the respective governmental regulations.

Brazil and Argentina have the highest local content requirement at 95% or over for 1970. Mexico follows with a minimum local content of 60%; then Chile with 52.9%; Venezuela with 41%; and Peru with 30% for 1970. Incidentally, only Argentina and Brazil differentiate between the passenger and the commercial and truck categories in their local content legislation.

The methods of measuring local content vary from country to country. Brazil and Venezuela employ the weight system, other countries measure local content by various systems based on value. It is expected that Venezuela will soon change to a weight/value system.

By extending the definition of local content to include parts and components acquired by regional interchange or complementation programs, significant advances can be made. The LAFTA ground rules have laid the basis for carrying forward this concept and among the Latin American countries where GM has manufacturing or assembly plants, Argentina, Chile and Venezuela have issued enabling legislation.

Chevy II Frame

The fact that Chevy II passenger cars are currently assembled by GM Chile and GM de Venezuela and manufactured by GM Argentina offers the opportunity to interchange locally produced parts and components of this car between these GM operations.

FIGURE I

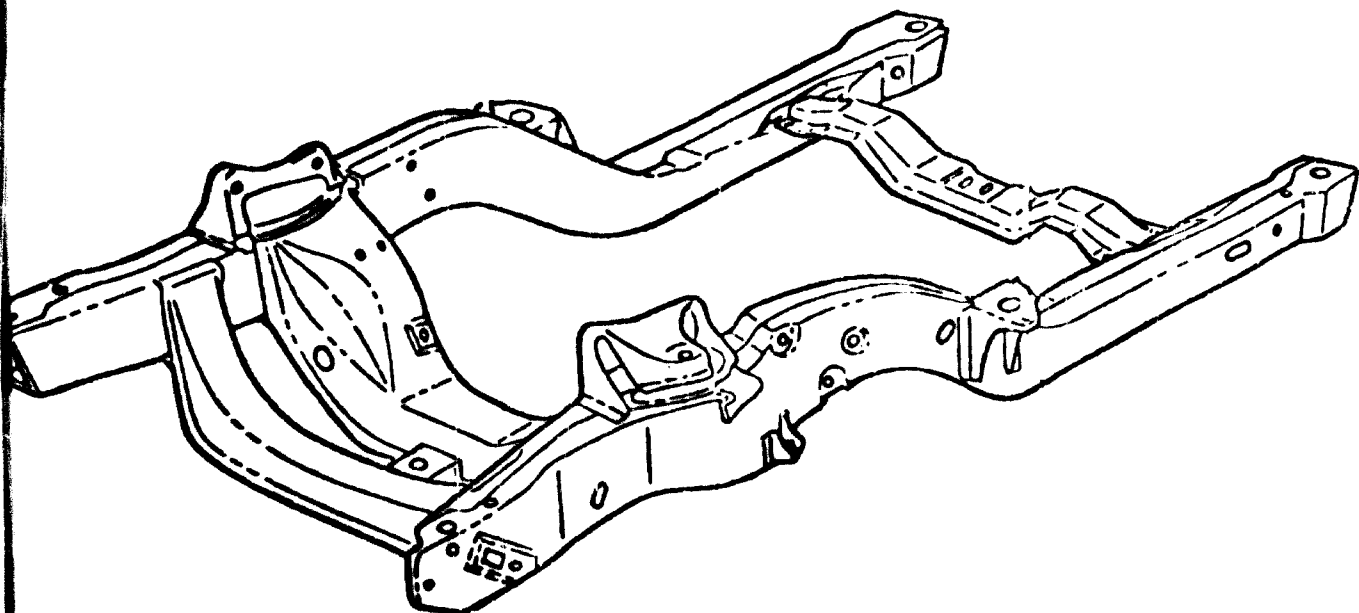


Figure 1 shows the Chevy II frame. The frame consists of 22 parts which can be summarized as inner and outer side members both left and right, front and rear cross members, engine and front suspension supports and various smaller brackets and supports.

To comply with local content requirements, General Motors Venezuela in 1968 decided to procure this frame from a local supplier. This item was selected because of its relatively high weight to cost ratio; furthermore, the frame design is not subject to frequent changes; and most importantly, because the same frame is utilized by GM Argentina and GM Chile in their Chevrolet passenger lines, interchange was possible.

Venezuelan Local Supplier

To the local supplier our decision was fortunate. The available press equipment - listed in Table 1 - was suitable for the manufacture of the Chevy Nova frame but utilized only at about 20% of capacity.

Table 1 - Equipment Used to Manufacture the Chevy II Frame

1. One 700 ton hydraulic double action press with a 325 x 1500 mm Bed.
2. One 600/300 ton hydraulic double action deep draw press with a 3000 x 2000 mm Bed.
3. Four 1200 and 100 ton hydraulic presses.
4. One 400 ton mechanical press 2000 x 1250 mm.
5. Sixteen 15 to 220 ton eccentric presses.

Reduction in Price Due to Added Volume

Our experience supports the economic concept that piece price reductions are possible as volume increases.

In 1968 General Motors de Venezuela procured Chevy II frames for local use only. In 1969, interchange of these frames with GM Chile was first established, but the volume was not sufficient to warrant a price reduction. In 1970, General Motors de Venezuela's volume, added to General Motors Chile's increasing requirements, led the Venezuelan supplier to grant a 14.6% price reduction for the Chevy II frames.

By 1971, when the Chevy II frame will also be traded between General Motors de Venezuela and General Motors Argentina, the projected total volume of Chevy II frames will be over 10,000 units per year. This combined volume of GM de Venezuela, GM Chile and GM Argentina will allow the local Venezuelan supplier to grant an additional 21% price reduction.

In summary, interchange between General Motors de Venezuela General Motors Chile and General Motors Argentina has brought about a 32.54% reduction from the initial price of the Venezuelan manufactured Chevy II frame.

Venezuela - U.S. Price Relationship

The price reductions resulting from increased volume of Venezuelan made frames can also be expressed in terms of the relationship of local to imported prices.

In 1969 the Venezuelan price for Chevy II frames was 150% over the U.S. price. In 1970 the Venezuelan-U.S. differential decreased to 110% due to the added volume obtained through interchange with GM Chile.

By 1971 the Venezuela-U.S. differential is expected to decrease to 70% since GM Argentina's Chevy II frame requirements will be added to those of GM Venezuela and GM Chile.

Even though Venezuela-U.S. price parity has not yet been achieved in this case, the substantial reductions described above decrease the penalty paid for local content attainment under low volume conditions.

Amortization of Special Tooling

In addition to the price reduction, tooling charges which represent a separate cost item are amortized over the added volume. The per piece price reduction combined with the reduction of the per piece tooling charge far outweighs the transportation cost from Venezuela to Chile, for example, which as a matter of interest is detailed below:

TABLE II

Frame Cost - Landed in Arica

Billing Price Per Frame		100%
Boxing, Handling	3.6%	
Inland Freight	0.9%	
Port Charges	0.6%	
		—
Sub-Total		5.1%
Ocean Freight	7.9%	
Chilean Marine Tax	0.9%	
Bill of Lading Charge	-	
Ad Valorem FOB La Guaira	1.0%	
Insurance	1.2%	
		—
Sub-Total		11.0%
Sub-Total - Insurance & Freight		<u>16.1%</u>
Total C.I.F.		116.1%

Development and Administration of an Interchange Program

There are three basic factors to be taken into consideration for the development and administration of an interchange program in the LAFTA area.

First of all it has been found that under existing conditions and regulations interchange programs can best be developed under the initiative of those individual automotive manufacturers that are established or are planning to establish operations in two or more countries within a region or sub-region such as LAFTA or ANCOM. This involves primarily the selection of the components to be imported and exported, testing and acceptance of samples, and establishment of delivery schedules for interchanged components.

The second factor is negotiations with the suppliers. These negotiations develop required quality, quantity, and delivery schedules. In addition, the possibility of lower prices in consideration of the expanded volume is explored. Frequently, the automotive manufacturers provide further technical assistance to their local suppliers in order to insure timely production and high quality of parts and components.

The third and most cumbersome factor is negotiations with the respective governments. The subsidiary companies in most cases must request approval for the interchange program. Presently, the time elapsed between the initial request and the official approval is too long. In addition, import and export licenses must be obtained, and finally, foreign exchange approvals must be requested.

In general, the first two factors present no great obstacle.

As to the last factor, it is expected that due to the interest governments have to increase interchange, simpler and speedier methods to obtain approvals will be implemented.

Conclusion

In concluding this presentation we would like to summarize some of the advantages to be gained from regional interchange programs.

Interchange strengthens the local automotive component industry. New markets increase output and reduce idle capacity. Concurrently, productivity increases and manufacturing costs decrease as overhead is absorbed by higher volumes.

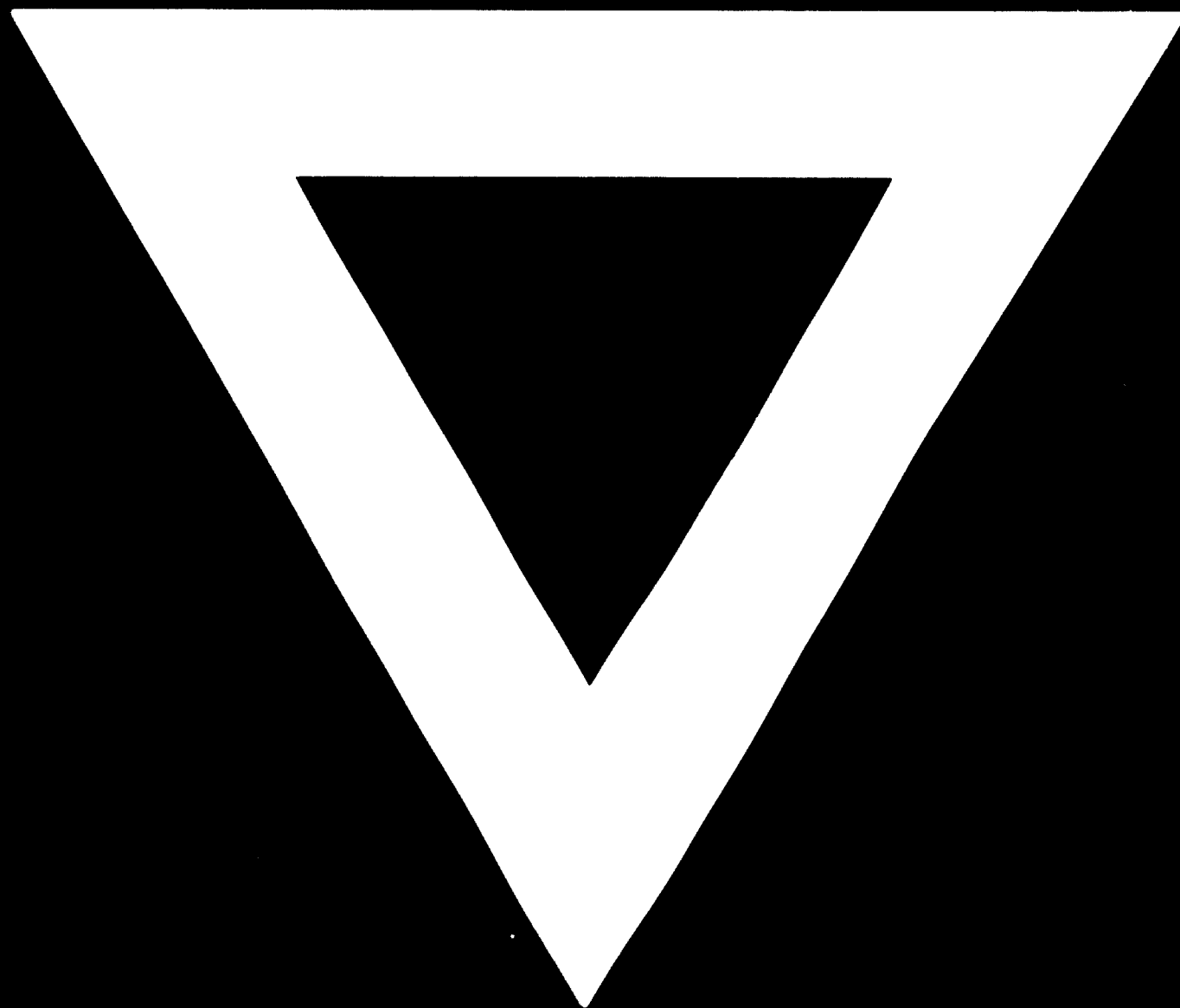
As local prices approach parity with international prices, export potential increases.

Interchange strengthens LAFTA by creating trade in non-traditional commodities, thereby binding the LAFTA countries together.

Finally, interchange increase the viability of the Latin American automotive industry by lessening local industry dependence on foreign supplies.

General Motors' world-wide experience indicates that regional industrial integration provides expanded sales through broader markets; reduces costs by increasing production efficiencies; and makes a significant contribution to the economic development of the participating countries.





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