OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.

DISCLAIMER

FAIR USE POLICY

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

20070

Distr.RESTRICTED

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

November 1992
Original:English

REPORT ON THE AUTOMOTIVE SPARE PARTS AND COMPONENTS INDUSTRY IN ZIMBABWE AND OTHER PTA COUNTRIES

Prepared for the 5 African countries
Botswana, Kenya, Tanzania, Zambia and Zimbabwe
by the United Nations Industrial Development Organization, Vienna.

Based on the work of
P.G. Adcock, Market Analyst

Backstopping officer: P. Scott
Feasibility Studies Branch
Industrial Investment Division

*This document has not been edited and UNIDO does not necessarily share the views presented.

TABLE OF CONTENTS

11. Appendices

1. Zimbabwe Registered Vehicle Population Statistics 1980-1991
2. Zimbabwe Vehicle Production 1981 - 1991
3. Botswana New Vehicle Registration 1990
4. Botswana Total Vehicle Registration 1990
5. Botswana Vehicle Registrations 1976 - 1990
6. Botswana Government Vehicles in use 1976 - 1990
6. Botswana Central Transport Organisation Fleet - Register 1992
7. Botswana. Private and Government Vehicles in use 1976 - 1990
8. Zambia Motor Vehicle Registrations 1982 - 1991
9. Kenya Vehicle Sales Statistics 1991
10. Vehicles in Use - Africa 1989
11. Zimbabwe. Essential Spare Parts
12. Zimbabwe - Projected Fleet Age Profile 1986 - 1996
13. S. African National Association of Automotive Component and Allied Manufacturers - membership Register 1991
14. Visits made - by type and by country
15. Zimbabwe. Automotive Component Manufacturers
16. Kenya - Restricted items through local manufacture 1980 - 1991
17. PTA Exports and Imports 1985 - 1985
18. Teksid (Iveco). Sales brochure
19. Iveco Foreign Collaboration 1992

1. EXECUTIVE SUMMARY

1.1 During the period 9 September to 6 November ninety visits were made to manufacturing operations, Ministry officials, commercial and trade organisations, vehicle assemblers, importers and dealers, component retailers and wholesalers and fleet operators in the countries of Zimbabwe, Botswana, Zambia, Tanzania and Kenya.

1.2 There was overwhelming evidence that Zimbabwe does have the ability to produce high quality vehicle components but considerable attention should be given to quality standards, pricing and marketing for domestic and export markets.

1.3 The economic scenario, prospects and declared future, as shown in Zimbabwe's Second Five Year Plan 1991-1995 demonstrates that the Zimbabwe Government considers the manufacturing sector the main plank in its recovery programme for the nation.

1.4 Serious consideration should be given to economies of scale, both in Zimbabwe and all other PTA countries, before further resources are committed.

1.5 A study of the resources within South Africa's automotive components industry should be considered in conjunction with the findings of this report.

1.6 Lines of communication with Finance Houses, the Commonwealth Development Corporation (CDC) and the Zimbabwe Investment Centre (ZIC) should be encouraged within the scope of this report.

RECOMMENDATIONS

1.7 **Short term** (immediate action)

- Create a formal Private Sector body to represent all sectors of Zimbabwe's automotive components industry.
- Encourage marketing strategies.
- Examine the possibility of a regional (PTA) Metallurgy and Engineering Centre to carry out the role envisaged in the UNDP report from Tanzania, not for one country but for the whole region.

1.8 **Medium term** (within one year and covering five years)

- Encourage the development of the PTA's role in marketing automotive components within member countries.

1.9 Long term (within one year and covering fifteen years)

- Encourage the development of joint venture links with a well established industrial partner to assist with technology transfer and development, skills training and with export marketing.

1.10 Feasibility studies

- A study should be carried out to consider the possibilities for a PTA regional Metallurgical and Engineering Centre.

- A study should be carried out to consider economies of scale and opportunities for technology transfer and greater Joint Venture participation, with an international partner, such as IVECO.

2. PURPOSE OF PROJECT

To assess the market demand and supply for automotive spare parts and components within the PTA/SADCC areas and indicate the feasibility of expanding existing manufacturing plants in Zimbabwe, together with recommendations on an industry objective and appropriate strategies over the next 10 to 15 years.[1]

2.1. Factors to be considered

1. General description of domestic and regional markets together with their relationship to international markets for major products. To include behaviour and peculiarities of markets and distribution, pricing and marketing policies.

2. The historical and current supply/demand situation for automotive spare parts in Zimbabwe and PTA/SADCC countries, with specific examination (by travel) of the situation in Botswana, Zambia, Tanzania and Kenya.

3. The international automotive parts market and possible export market potential.

4. Identification of the major buyers and suppliers in each country and description of the products in terms of quality and price.

5. Determine the likely products that could be produced by Zimbabwe over the next 10 to 15 years, considering local and foreign markets.

6. Comparison of the relative position of Zimbabwe with the existing foreign manufacturers and supply routes.

7. Investigate the possibility of a foreign joint venture partner who would be responsible for export marketing.

[1] *It should be noted that the original consultancy specification included the requirement for measurement of market size and value as shown by product mix, domestic and export sales revenue and marketing costs i.e. sales forecasts for ten to fifteen years. Reference to the sections on Market Size (5) and Country Reports (7) will demonstrate the great difficulty in precise measurement of the vehicle market by manufacturer, model, sub model and specification within year of manufacture. It was therefore considered impossible, through insufficient data, to be specific on components by part number and therefore sales value and so only general reference has been made to product groups across the industry.*

2.2. Methodology

The consultant was based in Harare, Zimbabwe for five weeks (from 9 September to 14 October) and then travelled to selected PTA/SADCC countries.

- Botswana (from 14-18 October), Zambia (from 19-26 October), Tanzania (from 26-29 October) and Kenya (from 30 October - 4 November). Thereafter he spent 2 days (5-6 November) with the Fiat/Iveco Teksid Foundry Division at Turin, Italy before returning to UNIDO headquarters in Vienna.

3. BACKGROUND TO THE STUDY

3.1. UNIDO role

Over the past ten years there have been several studies made of Zimbabwe's engineering industry as it has been widely recognised that the economic and supply conditions have created a demand and a performance that have naturally developed.

These studies have either been UNIDO led - for example DP/ZIM/90/005 - Institutional Support to Small Scale Industries and the Enhancement of Indigenous Ownership in Zimbabwe, June 1992 - or created by financial institutions with Governmental support for example:

i) Report on Country Capability in Zimbabwe Relating to Machine Tool Manufacture, July 1989. Joint panel from the Ministry of Labour and Technology, the Engineering Employees Association of Zimbabwe and the Zimbabwe Industrial Development Corporation (IDC).

ii) Zimbabwe. Development of Local Content of Motor Vehicle Assembly, February 1986. Commonwealth Secretariat for Zimbabwe Government. Commonwealth Fund for Technical Cooperation, IDU.

In addition there have been studies made by international motor industry consultancy organizations such as de Montfort Management Ltd., of Lichfield, UK, either examining the feasibility of Joint Ventures for importers or distributors or considering the feasibility of turnkey establishment of component manufacturing facilities.

In the case of this current study it was through the approaches of the Chairman of Zimbabwe Automotive Industries (Pvt) Ltd., the Fiat car and Iveco truck importer who is also President of the Indigenous Business Development Centre (IBDC), Zimbabwe that contact was made through UNDP/UNIDO.

It is to be hoped that the findings and recommendations of this marketing study will lead to a full feasibility study for the development of the Zimbabwe automotive components industry.

3.2. Zimbabwe's role and resources

The period of UDI (Unilateral Declaration of Independence) 1965-1979, with widespread international trade sanctions against Rhodesia, created an inventive and self-reliant indigenous industrial base. Thus when the United Nations lifted the trade sanctions, prior to the granting of Independence to the new nation of Zimbabwe, there existed a very comprehensive and entrepreneurial engineering industry.

It is the availability of the extensive mineral resources and its traditional skills of the work force, using the wide range of industrial equipment developed during that period, that form the strength and scope of Zimbabwe's manufacturing base.

Thus the manufacturing sector is the main contributor to GDP accounting for about 25% of the total. The most important sub-sector in terms of contribution to gross output is food processing and packaging which contributes about 24% to total manufacturing output, followed by metals and metal products (17%), chemical and petroleum products (15%) and drink, tobacco and textiles (12% each). 72% of manufacturing output is produced in the Harare and Bulawayo areas.

The mining sector, which is heavily export orientated, contributes approximately 7% to GDP.Zimbabwe has more than 40 different minerals. The principal ones being gold, asbestos, nickel, copper, coal and chrome. Although the Government has a significant involvement in the mining industry, production is in the main, carried out by a relatively small number of large companies, many of which are foreign owned.

3.3. Geographical and Economic Scenario

3.3.1. General

1. Area — 390,760 sq.kms. Mainly high plateau. Landlocked, being bounded by Zambia to the north and northwest, by South Africa to the south, by Mozambique to the east and by Botswana to the south west.

2. Population — 9.1 million (1989 estimate). More than 40% of the population is under 15 years of age. Three main cities - Harare, the capital 686,000; Bulawayo, 400,000 and Chitungwiza, 172,600. Annual growth rate 3.5%, 73% of the population is rurally based.

3. <u>Roads</u> 73,600 kms of which only 12,000 kms are bitumenised.

4. <u>Railways</u> 3,500 kms with connections with Botswana, Zambia, South Africa and Mozambique.

5. <u>Air</u> International airports at Harare and Bulawayo and domestic airports at Victoria Falls, Hwange, Kariba, Nyandu, Gweru and Buffalo Range.

6. <u>Supply Routes</u> By road and rail to seaports at Beira (Mozambique) and Durban (South Africa) as well as to main towns in neighbouring countries.

3.3.2. <u>Economy</u>

1. <u>Exchange rate</u> Recently has changed from being a stable currency to one suffering from devaluation.

Year end	1989	1990	1991	24/1/92	12/10/92
Z$ to US$	2.27	2.64	5.05	5.09	5.17

2. <u>GDP</u> Growth has recently been stunted through the worst drought this century.

	1988	1989	1990	1991	1992
Growth %	3.6	5.0	2.1	3.5(e)	2.0(f)

Latest forecasts for 1992 shows a fall of over 20%. GDP 1990 US$5,139m. GDP per capita 1990 US$571.

3. <u>GDP Sectors</u> Manufacturing accounts for 25% with agriculture at 12% and mining at 7% - the "productive sectors" making over 44% of the total. Distribution, hotels and restaurants achieve over 11%, transport and communication 6% and finance, insurance and real estate 6.5%. However, agriculture will suffer in 1992 due to the severe drought and the support needed from government in drought relief.

4. <u>Inflation</u> Has increased to 40% with short term lending rates at 45%. Not assisted by agricultural and manufacturing down turn due to water shortage and electric power load shedding, which has had a particularly severe effect on the manufacturing biased city of Bulawayo.

3.3.3. <u>Trade</u>

1. <u>Policy</u> Signatory to the Lomé Convention, to GATT and a member of the PTA and SADCC. However there are stringent customs controls for imports and urgent business can be disrupted through bureaucracy.

In September 1989, Zimbabwe committed itself to seeking to enter into appropriate bilateral and multi-lateral investment guarantee treaties by joining the World Bank's Multilateral Investment Guarantee Agency (MIGA).

2. <u>Direction</u> South Africa is the main supplier, providing 29% of imports followed by UK and Germany at 12% each, Botswana at 9% and USA at 6%. Exports are evenly spread with SADCC countries taking 15%, Asia 12%, UK 13%, W.Germany 10%, and other European countries 20%. South Africa only takes 10%.

4. ECONOMIC CHANGES

4.1. Open General Import Licences (OGIL)

Introduced in October 1990 as part of the Trade Liberalisation Programme - Economic Structural Adjustment Programme (ESAP) to permit certain specified goods to be admitted to the country; all other goods imported are subject to import licensing. The first group of products placed on the list were raw materials irrespective of whether or not they were already produced in Zimbabwe -to allow existing industries to increase capacity utilisation.

It is intended that in the middle of the programme, capital goods will be added to the OGIL list but consumer goods will be placed on the list only towards the end to give local industry time to modernise their production facilities, updating their technologies and to restructure their operations.

This will enable them not only to increase their production but also to increase their export earnings by producing at internationally competitive prices. It is hoped that then industry would be a net export earner.

It is anticipated in the Second 5 year National Development Plan 1991 - 1995 that the better availability of imported inputs, machinery and spare parts is expected to result in increased exports. Initially it is recognized that to implement this programme, international financial assistance in the form of concessionary credits, grants, foreign investment and balance of payments credits will be needed.

4.2. Economic Reform Programme (ERP)

This was introduced in January 1991 as part of the policy of the Second 5 Year National Development Plan 1991-1995 in order to create conditions for market led economic development as well as to stimulate productive investment, employment and exports.

The GDP for 1990 was Z$4414 million at 1980 prices; the annual growth for the 10 year period 1980 - 1990 was 3.2%.

The Plan aims to achieve average growth of a minimum of 4.6% per year. This will mean an increase in per capita GDP from Z$1508 in 1990 to Z$1673 in 1995 (at 1990 prices); that is from Z$4414 million in 1990 to Z$5530 million in 1995 (at 1990 prices).

The achievement of Plan objectives will require investment amounting to Z$17,100 million (1990 prices) over the Plan period. It is projected that of this total Z$6,900 million will be invested in the productive sectors of which it is expected 83% will be invested by the private sector. On the whole, the private sector is expected to invest Z$10,500 million, i.e. 61.5% of the total investment in the economy over the Plan Period. The rate of savings will be increased to an average investment level of 24.4% of GDP compared to an average of 18.9% achieved during the past five years. Foreign investment is expected to contribute about US$300 million.

The ERP covers all the main elements of the structural adjustment programmes - deregulation, trade liberalization, macro-economic stabilisation and a 'social dimension' element that aims to ease hardships on the population - for example introduction of Wages Collective Bargaining.

4.3. The Role of Manufacturing

During the First Five-Year Plan period, the manufacturing sector grew at an average annual rate of 4.1%, compared with the Plan target of 6.5%. Inadequate investment, resulting from the shortage of matching foreign exchange **(designated throughout this report as Forex)**, both for replacement and for setting up additional facilities, has been the main factor behind this slow growth. In addition, the lack of adequate foreign exchange for the importation of intermediate inputs and spare parts resulted in under-utilisation of existing capacity. This led to reduced output and higher product unit cost and discouraged fresh investment in the sector. Much of installed capacity is obsolete, making production uncompetitive on the world market. Although restrictions and protection encouraged the growth of import substitution industries, they also precipated monopolies and inefficiency in production resulting in high prices being charged for manufactured goods.

In spite of these handicaps, the manufacturing sector has established a wide base and its contribution to the GDP amounts to approximately 25%. In the formal sectors, it is the second largest employer of labour.

The metals and metal products group is one of the most important subsectors of the manufacturing sector. However, during the last few years, its performance has been below expectations resulting in its share of the sector's output value declining from 28.8% in 1980 to 23.4% in 1989.

Future Development

The manufacturing sector is expected to play a crucial role in the economic reform programme. The sector will continue to be the largest contributor to GDP and exports and the second largest formal sector employer. It is expected to achieve rapid growth and diversification of exports and to provide equipment, machinery and intermediate inputs to various sectors of the economy and to meet a large percentage of demand for manufactured consumer products, thereby reducing the economy's import dependence. Through this sector, Government expects to spread economic activities to rural areas and growth points. This will create employment opportunities for people in rural areas.

4.4. The Role of the Foreign Investor and Exports

4.4.1. Development Policies

The planned policies and programmes are designed to deepen the sector's role in the development of the country. Attempts will be made to make the sector at least self reliant in foreign exchange, if not a net earner of foreign exchange. To achieve this, foreign investment which introduces new technologies and opens additional export opportunities will be welcomed in all branches of industries. These measures are expected to make the economy competitive in the liberalized trade regime and ease foreign exchange shortages. The current foreign exchange allocation system will be replaced by a tariff based system. However, the tariff based system will be applied gradually and selectively.

Emphasis will be placed on the development of those industries which are export oriented or promote import substitution. To this end, areas which have shown success in the past will be strengthened. Comparative advantage will be the basis for setting up new manufacturing enterprises. The country will welcome the establishment of industrial projects which promote the introduction of new and better technologies, the reduction of import dependence, the promotion of regional economic cooperation and provide access to overseas markets.

For the further development of the sector, Government will encourage a higher degree of processing within the country to achieve a higher growth rate in the production and export of capital and consumer goods rather than intermediate goods.

Rules and regulations will be modified to eliminate any anti-export bias in the trade regime. Efforts will be made to increase and diversify exports and make them internationally competitive both in quality and price. Foreign investors in export oriented industries will be welcome to help in up-grading the country's technology base to produce higher quality products, increase labour productivity and to provide better access to overseas markets.

For promoting the export of capital goods a tie-up with well known plant suppliers and provision of suppliers credit will be facilitated. Government is considering the setting up of an **Export Credit Guarantee Scheme** to facilitate and promote the financing of exports. In the initial stages, selected items like capital goods, steel and steel products, mining and agricultural machinery, transport equipment, garments and leather goods and others will be covered.

The current industrial structure is characterised by a concentration of manufacturing activities in the major cities of the country. Although Government's policy of decentralization is beginning to have an impact, it is as yet insignificant. Government will give various incentives for the promotion of manufacturing activities at growth points and in small urban centres.

The Zimbabwe Investment Centre (ZIC) [1] will be strengthened in order to speed up the processing of investment proposals. However, by the end of the Plan period, the Centre will have shifted its emphasis to investment promotion. The investment guidelines will be continually revised and updated in line with changing circumstances.

Recently it was announced that improvements are envisaged in the rules for remittance of profits of foreign investors, favouring those companies that export all, or most, of their production.

4.4.2. <u>Investment</u>

In order to achieve the proposed average annual growth rate of 6%, investment amounting to Z$3,482 million (1990 prices) is projected in this sector during the 1991-1995 period. This represents 20.3% of the total investment in the economy compared with 19.5% targeted for the previous Plan period. The programme proposed for implementation in the public sector, primarily through the Industrial Development Corporation (IDC), and the Zimbabwe Iron and Steel Company (ZISCO), involves an investment of approximately Z$3,500 million of which a substantial portion will spill over into the next plan period. The PSIP for the Plan period is projected to be around Z$137 million (1990 prices).

Priority will be assigned to increasing the utilization rate of installed production capacity by providing foreign exchange to import spare parts, balancing/replacement equipment and production inputs.

4.4.3. <u>Exports</u>

During the Plan period, manufactured exports are projected to grow at an average annual rate of 8.8%. Exports of consumer goods are expected to grow at the rate of 10.2%, capital goods at 10.5% and intermediate goods at 7.9% per annum. Accordingly, exports from this sector are projected to increase from approximately US$610 million in 1990 to around US$930 million in 1995. Of this, about US$555 million is projected to be the share of intermediate goods, US$315 million of consumer goods and capital goods are expected to earn US$60 million.

4.5. <u>The Export Retention Scheme (ERS</u>

Another part of the Economic Structural Adjustment Programme (ESAP) - IMF led but tailored to Zimbabwe's needs - the ERS meant:-

(1) *A "one stop investment shop" established by the Government in 1989; a year later more than 100 projects worth Z$600m had been approved.*

4.5.1. All the productive sectors of the economy can retain locally a percentage of their export earnings.

4.5.2. For the Agriculture and Mining sectors (including cotton lint, beef, ferro-alloys and steel respectively) the percentage was initially 5% of the value of their export earnings but has since been increased (see 4.5.4 below).

4.5.3. The manufacturing sector was similarly originally able to retain locally 7.5% of the value of their exports while Tourism, onstruction, Horticulture, Road Hauliers and other service sectors initially qualified for 7.5%. These rates have also been increased (4.5.4 below).

4.5.4. Rates of retention were increased to 15% across the board from 31 December 1991 with retrospective effect for the half year July-December of that year.

4.5.5. The retained earnings can be used to purchase imported raw materials and capital goods for exporters' existing lines of operation.

4.5.6. The allocation is on a cumulative six month's export receipts.

5. MARKET SIZE

This aspect has been one of the most difficult of the mission. In an organized, well documented society it is possible to obtain the statistics for each model at first registration and then by totalling each year and allowing for scrappage over a period of 10-15 years, depending on national and climatic factors, arrive at a reasonably accurate vehicle parc figure, by manufacturer and by model.

Most of the countries surveyed do not keep such detailed statistics.

5.1. Zimbabwe

There were four sources of statistics:

5.1.1. Central Statistical Office, whose latest report was dated July-December 1987. The summary gave all first time registrations by sector-passenger vehicles, commercial vehicles (1), tractors, motor cycles and scooters and total for every year from 1964 to second half of 1987. There followed a manufacturer or model summary for all first time registered vehicles in that period July - December 1987. A collection of these reports from (say) 1976-1991, being 15 years, would have given a complete picture of what vehicles were on Zimbabwe's roads, excluding Defence Forces vehicles. But they did not exist.

5.1.2. The Central Vehicle Registry, Ministry of Transport were co-operative and were able to produce statistics of all vehicles registered for Road Tax each year going back to 1986 but for some reason 1987 figures were not available. These statistics covered all classes separately - Cars, Commercial vehicles, Motor cycles, Light and Heavy Trailers and others. The figures reasonably matched those in 5.1.3. They could not advise what makes or models made up the annual registration figures.

5.1.3. Motor Trades Association. They keep accurate statistics, based on those from the CVR (5.1.2) and being greatly interested in the fate of their own industry. However, again they could not be specific on what makes and models were on the roads. (See Appendix 1).

5.1.4. The Three Assembly Plants. They provided figures presented in different ways. Willowvale produced detailed statistics of each model assembled between the year 1980 - 1991 which would have been ideal but Leyland gave totals of cars, Light Commercial Vehicles (Pick ups), Heavy Commercial Vehicles, 4x4, Tractors and Rebuilds for 1981 - 1991 without giving the makes and models. W Dahmer gave the production figures for buses and trucks for the years 1981 - 1991. The total of all three production units for the years 1981 - 1991 was 90,095 units. (See Appendix 2).

(1) Shown throughout this report as LCV (Light Commercial Vehicle) and HCV (Heavy Commercial Vehicle).

So in the case of Zimbabwe it is only possible to state how many vehicles of different classes were on the roads, registered in the years 1982-1991, not which makes and models. The vehicles registered as at May 1991 were 404,000 (see Appendix 1). It is also possible to add in the Government Vehicles from figures provided by CMED (Ministry of National Supplies). These were listed as 14,000 all types.
This gives a total vehicle parc for Zimbabwe of 418,000.

5.2. Botswana

This country had excellent statistics provided by the Economic Consultant to the Ministry of Works, Transport and Communication.

5.2.1. Draft figures for 1990 were produced showing new registrations by make and type of vehicle. (See Appendix 3).

5.2.2. Another set of draft figures were produced for total registrations on the road in 1990 by make and type, comparing each make with 1989. (See Appendix 4).

5.2.3. A third set of figures gave a summary of the new registrations of vehicles by type only for the fifteen years 1976-1990. (See Appendix 5).

They also provided another set of statistics.

5.2.4. Government vehicles in use by type of vehicle for the fourteen years 1977-1990. (See Appendix 6).

5.2.5. Private and Government vehicles in use by type of vehicle for the same years. (See Appendix 7).

It was pleasing to note that the 1990 total shown on the table above 5.2.5. coincided with the total of 5.2.2 (14,423) and 5.2.4. (6,530) making a grand total of registered vehicles in Botswana for 1990 of 81,000 units.

5.3. Zambia

5.3.1. This country had no formal trade association for the motor industry and therefore lacked information on true market size as seen from the industry's point of view.

5.3.2. The Road Traffic Commissioner was very co-operative in providing detailed statistics for vehicles first registered in the ten years 1982 - 1991. (See Appendix 8).

5.3.3. It proved to be an error to have requested only ten years figures since :

- Some vehicles on the road were considerably older than ten years.
- 1982, the first indicated year, was the last of three years when there were very high registrations due to lax importation rules. These were tightened in 1983, import

duty of 50% imposed, and registrations fell in 1983 and subsequent years to around 10% of 1982.

- In addition there were many construction workers from the Far East, and motor cycles were very popular in 1982. Registrations for 1983 fell to just 5% of the previous year.

5.3.4. The Road Traffic Commissioner had no records for vehicle wastage - thefts, "cannibilisation" and personal exports, and, of course, vehicle write offs within the ten year period.

5.3.5. It was not possible to gain access to records of Government vehicle numbers but it is estimated in line with Botswana's scale that there were 7,500 vehicles in Government Service.

5.3.6. Therefore it is estimated that with the issued statistics of registrations between 1982 and 1991 of 83,700 vehicles, plus the estimated Government vehicle population of 7,500, reduced by shrinkage but increased by vehicles over 10 years old, the vehicle population is 95,000.

5.3.7. This figure does not compare well with the SMMT figure of 165,000, thus demonstrating that perhaps a good proportion of the vehicles first registered in 1980 and 1981 might still be in service, adding a further 40,000 - 50,000 vehicles to the estimated 95,000.

5.4. Tanzania

5.4.1. This country seemed to have no formal vehicle population statistics at all.

5.4.2. The Bureau of Statistics could provide no information and in fact had retained the services of a consultancy team to produce a records system; the last having been discarded ten years ago. The consultants had been working for over two years and were still some time away from satisfactory results.

5.4.3. The vehicle registration department had no statistics as each district carried out its own work and figures were not centralised.

5.4.4. The State Motor Corporation (Parastatal) had no opinion on the vehicle population.

5.4.5. Statistics were obtained by the unusual route of the parastatal insurance body, The National Insurance Corporation, who very unofficially, and probably without authority, offered figures for 1991 - being exactly the same as 1990 and within 6,000 of 1989 - that of 90,600. (See Tanzania Country Report 4.3).

5.4.6. They were unable to substantiate the figures as there could be 10% error due to possible non-insurance - there being no check that cars re-registered annually are, in fact, holding current insurance.

5.4.7. General opinion was that there might be about 12,000 vehicles in Government service; this being a 1986 figure.

5.4.8. Therefore the total vehicle population was estimated at around 112,000, which compares with the UK's SMMT figure for 1989 at 98,000 - a possible 12% error.

5.5. Kenya

Kenya, like Zimbabwe, has a formally structured Motor Trade Association but whereas Zimbabwe has a full time Director serving the interests of the members, Kenya's is run as a service by a public relations bureau.

5.5.1. These are very detailed statistics issued by the KMI on registrations by manufacturer, by model, with quarterly bulletins and half yearly comparisons with previous trends. These come from the importers and assembly plants. (See Appendix 9).

5.5.2. There are no statistics available for vehicle population and it would be pointless trying to project figures from those in 5.5.1. since the numbers of "grey" imports are not captured so the figures would be understated by between 4,000 and now over 8,000 per year.

5.5.3. Two estimates on vehicle population were provided:

- KMI suggested a very approximate figure would be 350,000 over 15 years plus 15,000 Government vehicles, making an estimated growth total of 365,000.
- Firestone Ltd. suggested the figures might be: Cars 150,000; Pickups, minibuses, light trucks, vans, 85,000; lorries and buses 40,000; tractors 30,000. Total (without motor cycles and Government vehicles) 305,000.

5.5.4. For the purposes of this report the KMI estimate of 365,000 vehicles has been chosen to be more correct.

5.5.5. The above figures compare with the SMMT figure for 1989 at an estimated 280,000.

5.6. Comparison of total

Throughout this section, reference has been made to the UK's Society of Manufacturers and Traders (SMMT) Statistics - Vehicles in use Africa and Oceania 1989. (See Appendix 10). Two observations should be made:

- The SMMT table only records cars and commercial vehicles, whereas this report has included motor cycles, tractors and government vehicles. It is not possible to know whether the SMMT figure for commercial vehicles includes buses but it is presumed that it does.

- The SMMT table has footnotes marked "Estimated", "Estimated - no information received for some years" and "latest officially quoted figures" - which could be many years ago. Therefore it is interesting to compare this report's findings with the SMMT figures.

Country	Current findings this report 000's	SMMT Report 1989 000's	Difference %
Zimbabwe	418	285	47
Botswana	81	37	119
Zambia	95*	165*	-58
Tanzania	112	98	12
Kenya	365	280	30
Total	1071	865	24
	* see 5.3.6	* see 5.3.7	

6. ZIMBABWE'S MANUFACTURING FACILITIES

6.1. Need for spare parts

In the past few years there has been ample evidence of the vital needs for spare parts.

6.1.1. The second Five Year National Development Plan 1991-1995 December 1991 stated that in assessing the priorities and the list of projects vital to the nation's needs, road transport was the main means of extending benefits of development activities to the rural areas and bringing them into the main stream of social and economic development. Accessibility of rural population to socio-economic centres can best be made through road transport. In view of this important role played by the roads sub-sector, extension of roads and road transport services into rural areas has been assigned priority during the Plan period.

It then singled out for attention the Government's own Central Mechanical Equipment Department (CMED), - visited on this mission on 30 September - which has 14,000 vehicles (8,000 cars, pickups and trucks, 2000 motor cycles, 2,400 earthmoving vehicles (of which 1,000 are tractors) and 1,600 trailers).

The Plan continued - over 50% of CMED vehicles, plant and equipment are life-expired. This inhibits the ability of CMED in fulfilling its duty of providing an efficient fleet to various Ministries and departments. The CMED will be granted the required resources for new vehicles and spares to avoid some of the following undesirable effects:

i) Slowing down of the economic reform programme, by creating transport bottlenecks for Ministries and Government agencies responsible for providing the infrastructure necessary for domestic and foreign trade;
ii) Higher operating costs than necessary for the running fleet, particularly for spares;
iii) Significant delays and high standstill costs for Government infrastructure projects;
iv) Increased unemployment in the construction sector;
v) Decreasing ability of Government to provide necessary public security.

6.1.2. The condition of the national road transport sector was highlighted in a report in 'The Financial Gazette', dated 17 September 1992, headed 'Hauliers need Z$25 million to revamp old fleet'.

The Executive Officer of the Transport Operators Association stated that viability in the commercial haulage transport industry was threatened because over 60% of nearly 26,000 vehicles were over 10 years old. The normal commercial requirement in this sector world wide was below 5 years. Although the World Bank had made available Z$20m (US$4m) earlier in 1992 for the importation of spare parts, the current high interest costs (over 40%) made it impossible for fleet operations to avail themselves of the facility.

There were also problems in the actual importation of spare parts by at least three international bidders through high duties and surtax.

The Z$25m was needed to refurbish old vehicles and to purchase replacement units.

Due to the devaluation of the Zimbabwe dollar, prices of spare parts and new vehicles had increased dramatically. For example, the ERF truck, imported in June 1991 through a British ODA programme and built from CKD kits by Hubert Davies, Bulawayo (visited on this mission 22 September) - where 170 remained unsold out of 440 - would cost a Malawi transport operator the equivalent of Z$630,000 for a truck assembled in Britain compared to Z$870,000 if the same truck had been assembled in Bulawayo and created employment there.

6.1.3. Conclusive evidence was produced in a report entitled 'Country Capability in Zimbabwe relating to Machine Tool Manufacture, July 1989' and drawn up by a panel consisting of a consultant to the IDC, an Assistant Secretary at the Ministry of Industry and Commerce and the Chairman of the Western Region Committee of the Engineering Employers Association.

Although the report was commissioned to examine the ability of the machine tool industry to take care of itself it also found that many companies were involved in the production of vehicle spare parts. The summary highlighted -

The inherent strength of the machine tool sector - many companies rebuilt worn machines and made new machines for their own in-house use. Ingenuity exhibited was of the highest order and if harnessed would place Zimbabwe in a major role as the 'locomotive' for SADCC (and PTA) in this field. In the sector of automotive spare parts the total sum of energy activated at present was very close to achieving manufacture of an indigenous passenger car engine *(1)*. In fact many discussions indicated that lack of confidence in basic raw materials - forgings, castings and heat treatment - was the only constraint. Some manufacturers already produce for Original Equipment Manufacturers (OEM), others have advanced machinery and techniques for refurbishing automotive parts. This, by small redirection, could produce new engine and transmission parts.

The report then continued to highlight automotive components satisfactorily made within Zimbabwe and drew attention to those high precision components such as engine and transmission gears that are not. A full list of these will appear later in this report. (See Appendix 11).

(1) Many might disagree ... P G Adcock.

The report also drew attention to the availability of skills and training in the country's technical colleges and the possibility of harnessing the resources of its colleges to batch manufacture components for short run requirements.

6.1.4. Report on the Maintenance Costs and Productivity of the Zimbabwe Urban Passenger Company (ZUPCO) Harare Division Buses - by vehicle, type and age DPP/TRRL Working Paper No.31 May 1992.

105 vehicles were surveyed, 12.7% of the present fleet of 823.

The constituency of the survey was as follows:

Age	Numbers	Percentage
12 months or less	30	28.7
Between 1-2 years	25	23.8
3-4 years	10	9.5
5-8 years	20	19.0
9-12 years	10	9.5
13 years+	[illegible]	9.5
	105	

It was found that the overwhelming cost of maintenance was the consumption of spare parts, ranging from 72% to 94% of total maintenance costs incurred. The average works out to 10:90 for labour:parts, evidence of the massive costs - mainly incurring foreign exchange for continued maintenance of the fleet.

It was noted that the company will increasingly suffer when importing spare parts as the international rate of the Z$ declines and the domestic rate of inflation continues unabated.

6.1.5. Zupco Harare Division - Operational and Financial Trends Annual Performance Report 1976-1991/92 - DPP/TRRL June 1992

- The bus fleet increased in size 18%, from 697 in April 1991 to 823 in March 1992.
- The average age of the fleet fell from over 8 years in 1988/89 to 6.86 years. The main deficiencies in the aging fleet had been gearbox and differential (transmission) shortages.
- Total annual mileage was 62.8m.kms.
- The major cost factor in the fleet had been spare parts (including tyres) at 21.2% (fuel and lubricants had been 20.7% and maintenance, including wages 15.5%).

<u>% of cost-spare parts including tyres</u> (out of total costs)

	1985/6	1986/7	1987/8	1988/9	1989/90	1990/91	1991/92
%	14.6	17.4	23.6	25.6	26.0	24.7	21.2
Total Z$m	27.4	35.9	44.7	53.2	63.7	85.1	125.9

6.1.6. General

The above cases amply demonstrate the importance that spare parts have in the commercial and social sectors of the community, being the bridge between success and failure in the vital task of bringing goods and services to the people in a very rurally biased country.

See Appendix 12. Projected Fleet Age Profile.

A World Bank Report "Emergency Drought Recovery Credit" written by M.S. Hicks 13 April 1992 drew attention to the difficulties that would be faced by missions involved in drought relief through the country's aging road transport fleet and the shortage of spare parts, both in the government fleet and those within to the Transport Operators Association (TOA).

6.2. Manufacturing Ability

There was ample evidence of the ability by the indigenous manufacturing operations to manufacture almost every component required for past and present vehicles. This is a by-product of the "seige economy", sanctions era when nothing was scrapped and to get a piece of machinery repaired and producing again there was no such thing as sending to the manufacturer for a spare part: it had to be repaired or another similar part manufactured.

This acquired ability developed from the jobbing scenario to batch production and so many companies have skills in several diverse areas. For example Radiator and Tinning Ltd., Bulawayo whose original purpose was to manufacture vehicle radiators, developed into manufacturing heat exchangers for all purposes (processing plant), then into manufacturing basic radiator cores for sale to other radiator repairers, then into metal processing and sale of billets to industrial processes and finally into general press work. Now making 2000 products - vehicle fuel tanks, water storage tanks and small pressings, like furniture hardware, bulldog clips.

Another example is Toolmaking and Engineering Co. Ltd. of Bulawayo, a member of the Willowvale Motor Holdings Group (51% Government, 49% owned by Mazda and others). One of their subsidiaries is Teamtec, a parts wholesaler, for whom they make many automotive components. Another subsidiary is

Guardian Engineering that makes military weapons and hardware and they also make cutlery, hard tools, toys, shoemaking machinery, York trailer axles - and they commenced trading as tool makers which they still are with, some very sophisticated spark erosion die making equipment.

6.3. Manufacturing Quality

As has been described manufacturing in Zimbabwe has developed from a "make it, or we die" industrial philosophy and there is no doubt that "necessity is the mother of invention". That being said the ability to manufacture or remanufacture an item has produced satisfaction in the customer and often, only later, has the quality of the product been questioned.

In fact there is almost a national belief that products made in Zimbabwe are much inferior in quality to imported products.

In the country's Foundry Industry there is a dire shortage of technically qualified staff and laboratories. For example in the report - A Survey of Foundries in Zimbabwe, A.K. Mitra, UNIDO/ZDC October 1984 - 27 foundries were surveyed out of 40 listed. The listed foundries employed around 6,000 people, and in the 27 foundries surveyed 4,775 people were employed. Of those 4,775 staff only 224 (4.7%) were qualified in foundry technology - one foundry (National Railway, Zimbabwe) had 111 qualified out of 131 employees, Nimr and Chapman had 35 qualified out of 500, Tinto Industries 13 out of 118 and Zisco Steel 21 out of 87. Therefore these 4 companies accounted for 180 of the 224 qualified employees in the surveyed industry.

Equally surprising, of all the foundries in Zimbabwe only 6 have laboratories. Not surprisingly, four out of the six have been listed above. The other two are O.Connoly and W.Craster.

There is a constant "war of words" between the Motor Trade Association and the Standards Association of Zimbabwe with each accusing the other of not knowing what is needed to achieve an acceptable quality standard. The infamous case of safety belts is always quoted but here, it was not a case of inferior product being passed by the SAZ, but of not having continuous assessment on a 100% basis.

There were constant complaints on the quality of steel from Zisco (Zimbabwe Iron and Steel Company) which suffers from underinvestment in equipment (rolling mills with worn out rolls giving inconsistent thickness) and produces to an inconsistent quality. W.Dahmer (Bus manufacturer) quoted an example of a 2 metre length of steel where three drills are needed to produce a hole in one end and one drill easily goes through the steel at the other end.

Yet this same manufacturer demonstrated from his list of suppliers that there were 245 (67%) Zimbabwe companies on his list of 357 suppliers, by volume not value. Not surprisingly, the main bus frame is made from steel from Germany but all the side members are in steel from Zisco.

Other countries, Botswana and Zambia in particular, do not share the same high opinion on quality manufacturing from Zimbabwe.

6.4. Price

As there is so much ability in the manufacturing sector so there is proliferation of suppliers and thus competitive pricing.

The real test is when components are produced for export and how competitive they prove to be on an international basis.

To give an example of competitive pricing examine the pricing policy of Teamtec, Bulawayo, a parts wholesaler, part of the Amtec Group. They offer to the trade and to importers, in their own brands, a full range of after-market parts for Mazda and Nissan. They are now expanding into export markets and recently made a successful business visit to Kenya. Examples of competitive pricing are given below:-

Description	*Model*	*Domestic price ex sales tax Z$*	*Export price F.O.B. Z$*
Cylinder Head Gasket	*Mazda F1000*	*46.64*	*6.51*
Camshaft Sprocket	*Mazda F1300/3*	*164.96*	*25.90*
Fuel Filter	*Mazda Universal*	*11.14*	*1.80*
Oil Pump Chain	*Mazda B1600*	*49.46*	*7.51*
Cylinder Head Gasket	*Nissan GN620*	*49.93*	*3.60*
Speedo Cable	*Nissan 120 Y*	*47.00*	*5.90*
Clutch Slave Cylinder	*Nissan PG720*	*167.62*	*21.05*
Brake Disc	*Nissan Sunny*	*235.09*	*27.26*

It is a policy of Teamtec to pass all components through the Standards Association of Zimbabwe; all components marketed bear the SAZ mark. This should create a measure of confidence in the product which is certainly competively priced.

6.5. Marketing

The UDI era in Zimbabwe did not create marketing skills. Manufacturers were able to sell all they could make, the greatest asset they could exhibit was the ability to source raw materials or procure reclaimable materials.

Therefore most companies exhibit the worst aspects of supply - they make to order and never consider how to expand beyond the borders of the country. Many examples of this trait were demonstrated during visits.

There are benefits and incentives for companies successful in the export market - in the form of Forex transactions and the Export Retention Scheme (ERS) and credits can be built up with the Central Bank and later sold at a premium.

6.6. The effects of the Republic of South Africa

This aspect is a negative feature in the philosophy of Zimbabwe's manufacturing resources - in that it is all one way, in South Africa's favour.

South Africa has many advantages.

- Large population. Over 24m
- Large vehicle parc compared to any single African country northwards

	1989	1990
New car registrations	203,279	186,754
Used car registrations	469,079	457,748
Total cars (only)	672,358	644,504

  Total vehicles in use (SMMT Report 1989)
  Cars 3.25m
  Commercial vehicles 1.34m
  Total 4.58m. Persons per vehicle 7.1

- Its biggest export is manufactured goods.
- Freight costs versus Europe and Japan.
- Freight time - 5 days Botswana, 4 weeks Zambia versus 4-6 months from Japan.
- Strong and beneficial export incentives (South African exporters held an exhibition in Nairobi in June 1992. "Plane loads" of Ugandans visited the exhibition.)
- The National Association of Automotive Component and Allied Manufacturers Directory 1992 shows 146 members, only (22%) of which do not list "Export" as one of their strengths. (See Appendix 13).
- Very large manufacturing base. Most European automotive component manufacturers have a subsidiary or a licencee in the country.
- A recent Trade Mission from Coventry (UK) found manufacturers were very willing to discuss export opportunities.

However attention should be drawn to the uncertainties surrounding South Africa:-

- Political upheavals
- Labour difficulties (strikes are on the increase)
- Severe unemployment (7m out of total population of 25m)
- Rumoured withdrawal of several of the European and Japanese vehicle manufacturers and the effect on local component manufacturers.
- Withdrawal of capital. Foreign investors withdrew R2bn (US$715m) in the second quarter of 1992, increasing from

R6.1 bn (US$2.1bn) in the whole of 1991 and R2.9bn (US$1bn) in 1990 - Report Lusaka Times, 22 October 1992.

Whilst it is very easy to consider the advantages that South Africa displays, the considerable uncertainty in the political and economic spheres should not be underestimated.

7. COUNTRY REPORTS

Introduction

A great number of personal visits were made mostly at Chief Executive level to Ministry officials, manufacturing and commercial operations, fleet operators, spare parts wholesalers and retailers, trade associations, vehicle assemblers, importers and dealers. As could be expected a wide range of facts and opinions were gathered. The numbers of visits were:

Zimbabwe	-	48	
Botswana	-	8	
Zambia	-	13	
Tanzania	-	7	
Kenya	-	13	
Italy	-	1	(Iveco, Turin)
		90	

See Appendix 14 for a detailed list by country, by sector. It is not possible, nor considered necessary, to report on each visit in Zimbabwe as there tended to be some duplication of findings amongst, for example, the 15 component manufacturers.

Certain and useful findings or facts emerged during these visits and these will be described; the real purpose will be to highlight trends, strengths and shortcomings.

Country reports for the other African countries have been given in some detail to give a complete picture of the situation.

ZIMBABWE

Visited between 9 September - 14 October 1992.

VISITS

As has been described a great number of visits were made covering vehicle assemblers and body works (9), vehicle distributors (4), component manufacturers (15), parts wholesalers and retailers (3), Government authorities and trade/commercial organizations (13) and fleet operators (4), a total of 48.

These meetings would not have been possible without the assistance of the UNIDO JPO in Harare and the generous contribution of UNIDO's counterpart, Mr J T E Mapondera, Chairman, Zimbabwe Automotive Industries (Pvt) Ltd, the Fiat car and Iveco truck importer and distributor, who made administrative support and transport freely available.

There are four contractual assembly plants in Zimbabwe:-

Willowvale Motor Holdings (Pvt) Ltd part parastatal, part owned by Mazda.

- cars pick ups and commercial light vehicles (Mazda, Peugeot, Talbot)
- heavy commercial vehicles (Bedford, Fiat, MAN, Scania, Totyota, Mazda)

Leyland DAF Ltd, Mutare (belonging to Leyland Manufacturing (Zimbabwe) Pvt. Ltd.)

- cars, pick ups and light commercial vehicles (Nissan, Mitsubishi)
- heavy commercial vehicles (Daihatsu, Hino, Leyland DAF)
- tractors (John Deere)
- 4 x 4 (Land Rover)

W. Dahmer and Co. (Pvt) Ltd, Harare - a Lonrho subsidiary.

- AVM buses based on the DAF engine and other components
- AVM trucks

Hubert Davies Zimbabwe Ltd - an independent company.

- ERF trucks. An ill fated British ODA deal in 1991 where over 150 vehicles are unsold out of 440 through Government changes in taxes and currency devaluation.

There are over one hundred component manufacturers, making for Original Equipment and after market requirements and reducing the need for importation of original manufacturers' components and the need for Forex.

For example:

1. **Zambesi Coachworks Ltd., Harare**

A Lonrho subsidiary, and a sister company to W Dahmer, the bus assembler. Market leader in manufacture of trucks, cars and buses. Most of the components used are made by themselves - springs, axles, trailer landing legs, ventilation systems for buses, aluminium extrusions for bus windows, tow hitches and fifth wheel couplings for trailers, and tie rod ends for steering mechanisms. Their sister company, Eastern District Engineer (Pvt) Ltd, Mutare, makes many of the above forged and cast components and also makes fly wheel housings and clutch housings for Leyland, DAF and Cummins engines. EDE Ltd was not aware that Cummins Zimbabwe gave up looking for more suppliers two years ago, when they reached 20% local content, and could not find further quality suppliers.

2. **Auto-electrical Product Manufacturing Co. (Pvt) Ltd, Harare**

Founded in 1975 by Mr Carmelo Ali - see Botswana. Manufactures front and rear lamps for light commercial vehicles - supplied to Willowvale, W Dahmer and Leyland Motors. Does not sell to aftermarket. Also manufactures 12v and 24v alternators and is developing starter motors - sold in the aftermarket. Does not make wiring looms although they make up their own wiring for the lamps. Very vague about after market sales - have enough business from assemblers and main dealers.

3. **O. Connoly & Co. Ltd., Bulawayo**

Long established with foundry operation, makes railway axles for the whole of SADCC. Advanced machine shop - 6 CNC lathes making parts for Lister diesel engines, manufactures gear boxes for cranes, and grinding mill components in high nickel chrome and molydenum steels. Casts and cylinder housings for National Railways (NRZ) and has a Disamatic Automatic high speed moulding line (only 50% utilised!) for vehicle brake drums, shoes and hubs and engine cylinder liners.

4. **Kenrose Filters Ltd, Mutare**

Has the licence to make filters from Crosland UK. High quality and wide range of oil, air and fuel filters. Is developing filters for Peugeot and Leyland DAF. Has considerable amount of investment, still hardly used (including perhaps the only 200 ton hydraulic press in Zimbabwe for deep drawing filter covers) because of dust problems from neighbours. Is one of only two filter manufacturers in Zimbabwe.

5. Payen Zimbabwe Ltd, Bulawayo

Commenced 1983 making engine gaskets. Subsidiary of T&N plc of worldwide manufacturer of engine components. Imports raw material from other Payen operations - UK, France, Italy, Japan. Makes a very wide range and supplies all dealers (eg. Dulys, Puzey and Payne) and wholesalers like Teamtec.

Has considerable difficulty maintaining reputation in face of inferior imports from Botswana, Zambia and Malawi. Has been trying to obtain import clearance for machinery to make oil seals as in the product range of Payen overseas. Also has plating and engineering subsidiaries making pressings for furniture and automotive applications.

6. Can-Des Auto Electrical (Pvt) Ltd., Bulawayo

Electric motor rewinding, auto electrics, diesel fuel injection. Six years ago he applied for Government licence to manufacture auto light bulbs (Zimbabwe imports all auto and domestic light bulbs). Would import machinery from Taiwan and Germany - full Taiwanese package, including materials for a year's production and support engineers costing US$700,000 (latest quotation 7/1/92). Still awaiting approval, although he has the capital, he is reluctant to go ahead through lack of confidence in the economy and Government intentions.

Note: See Tanzania, Tasia Groups of Companies. Auto bulb plant capable of manufacturing all PTA requirements, currently working at 20% capacity.

7. Amtec Engineering (Pvt) Ltd., Harare

Part of the Amtec Group/Willowvale Motor Holdings Group.

Has a non ferrous foundry -	brass, bronze and aluminium for car wheel rims, farm/plough wheels.
Has cast iron foundries	- brake discs and drums (truck and trailer), Nissan, Peugeot, Mazda, Land Rover - bearing housings (agriculture) - wheels for mining trucks - pump housings and bodies

Also makes brake master and wheel cylinders, thermostat housings and caps, exhaust manifolds for 700 different models, and bell and water pump housings.

Also converts and builds conversions for Mazda Pickups.

8. General

A representative list of components manufactured in Zimbabwe appears in Appendix 15 but, by no means, is it exhaustive.

It is interesting to note from a report commissioned by the Commonwealth Secretariat entitled "The Development of Local Content of Motor Vehicle Assembly", February 1986, that five components were highlighted as short term objectives for being manufactured in Zimbabwe. They were:

* Hydraulic shock absorbers
* Clutch plates and cover assemblies
* Prop. shafts
* Alternators
* Wiper Motors

The report suggested that manufacturing the components locally would save at least Z$75m over five years, even after providing for outflow of Forex for import of capital goods, components, raw materials and technology. Total output of the products would be around Z$130m.

Well within five years of the report, the first four products listed were being manufactured locally, the last one, wiper motors, probably never will be.

BOTSWANA

Visited between 14 - 18 October 1992.

1.0 General

1.1	Area	582,000 sq. km. 5% is arable and 20% suitable for grazing. Landlocked, bounded by Republic of South Africa in the south, Namibia in the west and north and Zimbabwe in the East.
1.2	Population	1.325 million (1991 census). Some 316,000 live in urban areas with 2 main cities, being the capital Gaborone with 133,800 population and Francistown 65,000. Annual growth rate 3.4% but Gaborone has seen its population double since the 1981 census (average of 8.4% p.a).
1.3	Roads	8,204 kms (1989 figure) of which 2,360 kms are bitumenized.
1.4	Railways	640 kms of main line extending from Ramatlabama in the south (1400 kms from Cape Town) to Bakaranga in the north; passing through Lobatse, Gaborone, Mahalapye to Francistown. A further 175 kms spur line from Francistown to Sua Pan was recently opened to serve the Soda Ash plant.
1.5	Air	One international airport at Gaborone and three internal airports serve the country.
1.6	Supply Routes	By road and rail to South Africa and its seaports.

2.0 Economy

2.1 Exchange Rate — Very Stable.

	1989	1990	1991	15/10/92
Pula per US$ at year end	1.87	1.87	2.16	2.10

2.2 GDP — Growth is around 7 - 8% in real terms with current forecast reduced to 4%. GDP forecast for 1991/92 is P7,900m (US$ 3,762 m) with per capita GDP estimated at over P5,950 (US$ 2,833).

2.3 GDP Sectors

In 1990/91 mining (mainly diamonds) accounted for 42% and diamonds make up approximately 85% of the country's exports. Copper/nickel, coal, platinum and salt/soda ash are also mined. Agriculture 4%, mainly beef to EEC. Growth in all sectors of the economy with transport and communications sector showing the highest rate of growth at 15.6%, followed by trade, hotels and restaurants; water and electricity; and banks, insurance and business sectors showing growth rates of 8.6%, 8.5% and 8.4% respectively in 1990/91.

2.4 Inflation

Mostly imported from South Africa. In December 1991 it was 12.6%, up from 11.3% in 1990/91. Current figure is 17.1% (June 1992).

3.0 Trade

3.1 Policy

Signatory to the Lomé Convention (1975). Member of South African Customs Union - with South Africa Swaziland, Lesotho, and Namibia - which provides for free trade within the Union and also, as member countries all apply South Africa's external customs tariffs, there is a common pool of customs duties. Botswana became a member of GATT in 1987.

3.2 Direction

South Africa is the main supplier, providing 85% of Botswana's imports but taking only 4% of its exports.

4.0 Visits

With the assistance of the UNIDO JPO 8 visits were made in the 2 days to 4 Government authorities and to 4 commercial operations, all in Gaborone.

4.1 Carally Auto-Electrical and Diesel Services

Mr. Carmelo Ali founded Auto Electrical Product Manufacturing Company (APMC) in Harare and after 4 years is still hoping to build in Botswana a similar factory making auto electrical parts. He imports lamps, solenoids and regulators from his factory in Harare.

4.2 Taurus Batteries (Pty) Limited

Very large importer and distributor of electrical components. Turnover P700K (US$ 333K) PA. Purchases all requirements from South Africa and Taiwan. Manufactures Chloride Batteries under licence. Obtains casings from Chloride Zimbabwe. Works to British standards. Opinion that products from Chloride Zimbabwe are inferior in power and styling to his own products and those from South Africa. Believes that Zimbabwe producers would have to change their competitive stance considerably before he could be persuaded to purchase from them.

4.3 Ministry of Works, Transport and Communications

Senior Planning Officer/Economic Consultant.

In 1990 Private vehicle registrations at 74,500 (up 17% in 1989) with a further 6,400 Government vehicles, making a total vehicle parc of 81,000 (See Appendix 6). All vehicles imported and there being a small truck assembly operation (Toyota franchise dealer). Market leader Toyota 29,000 (+23% on 1989), next largest Ford at 5,700, then Mazda 4,400 (+34% on 1989). Very fragmented with 16 named makes and large percentage (19%) shown as "other" - cars and trailers. Would welcome alternative sources for components other than from South Africa.

4.4 Ministry of Works, Transport and Communications

General Manager/Management-Central Transport Organisation.

Government vehicles, workshops and stores. HQ and 10 workshops around country. Have 5,015 cars, pick-ups, trucks and buses, mixed Nissan, Toyota, Ford, Mazda and Mercedes. (see Appendix 6) Purchase spares on open tender from dealers; if quantities dictate then place tenders on manufacturers.

4.5 Ministry of Commerce and Industry

Principal Industrial Officer - Department of Industrial Affairs.

Needed persuading that SADCC countries can rise to the challenge e.g. Tanzania was charged with responsibility for industry but now concentrates on exporting to Botswana. Whole region very dependent on South Africa. Zimbabwe must improve quality and marketing. South Africa will not relax and allow substitution of its own exports; they have a very strong approach to distribution. Zimbabwe has skill and infrastructure and should examine world leaders in spare parts manufacturing and consider joint ventures.

4.6 Ministry of Commerce and Industry

Principal Commercial Officer - Department of Trade and Investment Promotion.

His function exists to encourage industry to come to Botswana. Little encouragement for the opposite role - that of Zimbabwe taking industrial effort from Botswana unless it could be presented as a joint advantage to Botswana's balance of payments - which he doubted through the custom's unions advantages.

4.7 Motovac (Pty) Limited

Family business. Very large parts wholesaler and retailer. Handles importation for Toyota, Datsun/Nissan, Mazda, Ford Isuzu, Scania car and truck parts. Purchases all types/components engine, clutch, brake, electrical, suspension and body parts from South Africa, Taiwan, wherever cheapest. His prices are up to one third of manufacturers' recommended retail prices and half the imported price from South Africa.

e.g. Toyota Cressida Tail Lamp
Manufacturer's Price P400
Imported from RSA R180 = P140 + Carriage
Their price P100

e.g. Toyota Hilux Shock Absorber
Manufacturer's Price P87.00
Their price P41.50
Would purchase from Zimbabwe if the components were competitive.

4.8 Motor Centre Botswana (Pty) Limited

Large franchise dealer. Parts turnover P21M pa.

- Toyota 40% Market share
- BMW
- Mercedes - car and truck

Largest independent dealer in Africa for Toyota. Also assembles Toyota trucks. Absolutely tied to the franchises and sees no possibility of selling pattern parts from Zimbabwe or elsewhere. Agreed that if Zimbabwe parts marketed correctly then there was a future for them.

5.0 Summary

5.1 Majority of vehicles imported from South Africa.

5.2 The majority of the vehicle parc of 81,000 units is high quality and good condition. Cars over 7 years old were a rarity - compared with Zimbabwe.

5.3 High proportion of Toyota, Ford and Mazda - all different models to those in Zimbabwe.

5.4 Botwswana's customs union with South Africa makes it more difficult for Zimbabwe to export components to Botswana.

5.5 Zimbabwe components viewed with caution on quality.

5.6 It is believed that Zimbabwe could be successful exporting components to Botswana if sufficient attention is given to quality and marketing.

KENYA

Visited between 30 October - 4 November 1992.

1.0 General

1.1.	Area	580,637 sq. km. Bounded by Ethiopia in the north, Sudan in the northwest, Uganda in the west, Tanzania in the south, a stretch of coast line facing the Indian Ocean in the southeast and Somalia in the east.
1.2.	Population	22.9 million (1991 Provisional) Annual growth 3.3%. It is estimated that population will reach 35 million by 2000. Over 60% under the age of 20. Two main cities, the capital being Nairobi, the largest city in East Africa with a population of over 1 million; the second city, Mombasa has 800,000 people. Other principal towns are Thika, Eldoret, Kitale, Nyeri, Nakuru, Kericho and Nanyuki.
1.3.	Roads	62,600 kms of which 8,300 kms are surfaced with bitumen and the remainder with earth and gravel.
1.4.	Rail	3,360 kms connects Nairobi and Mombasa with other business centres such as Kitale, Kisumu, Nanyuki and Magadi. The network extends to Tanzania and Uganda.
1.5.	Air	International airports at Nairobi and Mombasa and most of the principal towns also have airports.
1.6.	Supply routes	By road and rail to Tanzania and Uganda and through the seaport of Mombasa.

2.0 Economy

2.1. Exchange Rate — Steady devaluation linked with inflation.

	9/88	12/90	2/91	6/92	11/92
KSh/US$	18.47	24.05	28.80	31.84	35.29

2.2. GDP — Growth has been steady between 4.5%, and 5.2% for the years 1987-1990 with 1991(provisional) at 2.2% and forecasted for 1992 at 2% in real terms. GDP for 1990 was US$8,756 million with GDP per capita for that year at US$364.

2.3. GDP Sectors

Agriculture is the major economic activity and accounts for 35% of GDP, provides a living for about 80% of the population and employs 14% of the wage earners. There was a reduction in GDP share in 1991 due to severe drought. Tea and coffee are the main cash crops. Food crops are maize and wheat. Manufacturing is an increasingly important sector (Kenya is the most industrialized country in East Africa and second only to Zimbabwe in the PTA) Manufacturing contributes 17% to GDP but accounts for little export since most goods are for domestic consumption - petroleum refining, food processing and canning, tobacco, paper, textiles, cement and vehicle production. Growth has been around 5% p.a. since 1987. Tourism (14%) has suffered through world recession and some adverse publicity.

2.4. Inflation

Increased from 15.8% in 1990 to 19.6% in 1991. Current figure is around 25%. Bank interest rate is 18%.

3.0 Trade

3.1. Policy

Signatory to the Lomé Convention and is a member of the PTA.

3.2. Direction of Trade

The three largest suppliers are UK (16% of total in 1991), UAE (oil products 12%), and Japan (motor vehicles and electrical products 11%). Other PTA countries supplied 2%. Major customers in 1991 were UK (horticulture, tea, coffee, 16%). W.Germany (8%) and Uganda (6%). PTA countries took 3.6% of which Uganda took 39% of the total PTA area.

4.0 Visits

With the complete assistance of the UNDP/UNIDO National Industrial Engineer, whose role is to provide assistance towards integration and capacity optimization in industry and who provided all transport and accompanied the writer to all meetings, 13 visits were made in the 4 days to 1 Government authority, 1 trade association and to 11 commercial operations, all within 40 kms of Nairobi.

4.1. Ministry of Industry - Deputy Director

There are 3 Assembly Plants which commenced operation in the 1970s.

- Kenya Vehicle Manufacturers (Cooper Motor Corporation 32%; D.T. Dobie 32%; Government 35%) Assembles Land Rovers, Suzuki, Leyland DAF, Mitsubishi, Nissan trucks and buses, Mazda cars and pick-ups.

- General Motors Kenya (General Motors 45%, C.Itoh 4%, Government 51%.). Assembles Opel and Isuzu.

- Associated Vehicles Assemblers (Government 51%. Motor Mart (Lonrho) and Marshalls). Assembles Peugeot, Fiat, Fiat Iveco, Toyota, Mitsubishi cars, Hino and Volvo Trucks.

Considerable local content in assembled vehicles, thus providing the need for a restricted list, known as Legal Notices (see Appendix 16). All steel is imported from Zimbabwe, Europe, S. Africa and Japan. Many gaps in local content; need assistance on a national level for:-

- Gear cutting technology

- Manufacture of propellor (drive) shafts

- Casting technology

- Forging

- Fast moving parts. e.g. fan belts.

Recent tax changes implemented to encourage smaller vehicles (cars and pick-ups up to 1500 cc), also trucks, taxis and buses. Provided list of import excluded/locally manufactured items. (See Appendix 16).

4.2. Kenya Motor Industry Association

Kenya has 13 main dealers with 22 makes of vehicle. Production of locally assembled cars currently going through crisis of confidence. 60% fall in units built in last 2 years because of shortage of Forex and "grey imports". Licences for imports fallen from Yen 15bn to Yen 6bn this year.

1989-91 ... 4-5,000 grey imports p.a. (reconditioned MOT rejected cars from Japan e.g. Sunny B12)

1992 ... 8,000 units. Models have not been built in Japan for over 2 years - problems in providing after sales in Kenya.

Local component content protected by import ban - covers between 15-35% by value (1300 Saloon has 40 items valued at 50%) e.g. Tyres, batteries, shock absorbers, radiators, exhausts, leaf springs. Local importers/franchise holders like imported manufactured components because of the quality and lack of testing needed. Local suppliers have difficulty in maintaining quality. Main advantage - freight saving, local added value and made to withstand African conditions. Kenya Bureau of Standards not in harmony with motor industry and trade. For production and sales figures - see Appendix 9 -

Market size estimated at 350,000 over 15 years - plus approximately 15,000 Government vehicles.

4.3. D.T. Dobie & Co.(Kenya) Ltd.

Importer (and part of assembly group KVM) and franchise holder for Nissan (CKD) and Mercedes (FBU). Stated that there are more Mercedes per capita in Kenya than anywhere else in Africa. Has 31 branches or dealer outlets. Nissan is market leader after 23 years - 22% of market - followed by Toyota, Isuzu, Mitsubishi and Peugeot 504/405. Supports genuine parts route because of dealer loyalty.

4.4. Megh Cushion Industries Ltd.

Has tooling for seats and trim for 48 models. Manufactures seat cushions from chemicals imported from Europe - freight is expensive. Kenyan import duty 35% whereas South Africa has an import duty on its raw materials of 10% making Kenyan production uncompetitive. Therefore other PTA countries will find South Africa a more competitive supplier than Kenya. Morale is low in manufacturing sector with production levels so low against previous years.

4.5. Auto Filters Ltd and R.B. Shaw Africa Ltd.

Manufacturer of Crosland Filter (under licence) and Mintex/Don brake shoes and pads. Obtained licence in 1986 to assemble from imported components. Now locally sourced, except filter paper from Germany. Filter is stamped Kenya Bureau of Standards, is warranted for 6 months and/or manufacturer's cover and quality is checked by Crosland, U.K. No longer exports to Zimbabwe through shortage of raw material; also Far Eastern competition sells cheaper than Auto Filter's raw material cost price. Production capacity 20,000 per month in a single shift. Current production 10,000 per month. Strong possibility that they are ceasing manufacture through unfair import competition. Local brake linings have 95% of the market.

4.6. Auto Spring Ltd.

Running 3 shifts. Manufactures leaf springs, bolts, fastenings and also wiring looms for all requirements. Also makes disc brake backing plates and developing CV fuel tanks and bumpers (fenders), pick-up cabs and seat pans with some new press capacity.
Leaf springs - purchases steel from South Africa (previously from Japan). Requested supply from Zisco, Zimbabwe but never received quotation: manufactures 80% of all requirements and has 75% of aftermarket. Wiring loom manufacture is very unusual in PTA region.

4.7. Associated Gasket Manufacturers Ltd.

Only manufactures soft gaskets (raw materials from UK, Italy, India and Taiwan) but not metal gaskets. Reckons aftermarket is split 25% importers; 75% locally manufactured, of which AGM has 60% market share and Payen Kenya has 40%. Is not exporting yet but has plans for Uganda and Tanzania.

4.8. Kenya Vehicle Manufacturers Ltd.

One of the three assemblers (see 4.1). Handles 35 different models from kits, which the importers source and then pass to the assembly plant. Capable of assembling 4,000 units per year, current rate is 3,200, 1993 is forecast at 2,500. The Government has not renewed licences - shortage of Forex. Very concerned, as there is a lead time of 4 months from licence to delivery of kits from Japan. Again morale is bad - imports are cheaper by 50% than locally built CKD (1) vehicles because personal importers underquote values at importation.

4.9. General Motors Kenya Ltd.

Another of the three assembly plants (see 4.1) but this was a components visit. Not impressed with quality of locally manufactured parts - gaskets, shock absorbers, filters, glass. Quality OK on leaf springs, wiring looms, batteries, tyres.

Highlighted problem of items on the 'Restricted List'. If vehicle manufacturer changes the specification and the local component manufacturer cannot comply then the new component has to be removed from the list and anyone can import it. Therefore importer loses control of new parts importation.

4.10. Hill Products (K) Ltd.

Manufactures shock absorbers under licence from Armstrong (UK), part of Monro (Belgium). 100% manufacture for OE. Maximum capacity 100 units per day, currently 35-45 per day. Range covers any vehicle since 1970 but major problems with new specifications from Japan (see 4.9). Exports to Amtech, Zimbabwe.

4.11. Burns and Blane Engineering Ltd.

A Motor Mart (Lonrho) Company. Manufactures radiators for assemblers and covers 80% of the market. Imports copper from Belgium, UK and Germany. Can make 35 per day on 1 shift, current production 25 per day.

Also manufactures exhausts (OE and aftermarket), assembles seat belts, makes agricultural trailers and implements and signs of all types (road, and advertising).

(1) CKD is Completely Knocked Down (Kits)
SKD is Semi Knocked Down (Part kits)
CBU is Completely Built Up (Complete shipped vehicles)

4.12. Motor Mart Group Ltd. Toyota Kenya Ltd.

Visited the parts division of the company. 200 staff out of total 1100. Turnover US$14m pa. 12 locations covering Toyota (20% market share) Mitsubishi, Fiat, Massey Ferguson, Yamaha and Hanomag.

Local content of components is 28% by value, which makes vehicle 50% more expensive than if it had been supplied CBU. Major problem with purchasing components through third parties because unavailable specifications are still on Restricted List eg. glass, shock absorbers, exhausts, batteries, spark plugs (Champion licence but everyone wants NGK), brake pads, radiators. Lead time for parts order from Japan is 15 months; delay due to licence application.

4.13. Firestone East Africa (1969) Ltd.

OE supplier, 80 different sizes. Split 35% car, 40% light truck, 25% truck and tractor. Assembly plants and component manufacturers are under utilised because of the scarcity of Forex and CKD cars being 50% more expensive than imports. Tyre manufacture used to be 15% OE, 85% replacement; now it is 10% OE, 90% replacement. Quality good, heavier specification than European tyre because of road conditions. Exports 15% to PTA countries (Uganda, Zimbabwe and Tanzania). Tyres purchased from Japan 60% duty; from Zimbabwe (PTA) 25% duty.

5.0 Summary

5.1. There are 77 different models being assembled from CKD kits by the three assembly plants, which have 51% government ownership.

5.2. Production has fallen from the normal 15,000 - 18,000 units per year to around 8,000 units. Forecast to be even less in 1993 - if the Government issues the licences, which are already three months late.

5.3. On the other hand 'grey imports' (CBU and Japanese second hand/refurbished vehicles) are filling the void, increasing from 4,000 p.a. over the past two years to 8,000 in 1992.

5.4. There is a comprehensive component industry capable of producing a wide range of indigenous parts (see list of 37 items on the Restricted List - Appendix 16) but it is being destroyed through lack of Government decision on new licences and control of illicit imports on the new specification route.

5.5. The vehicle parc is considered to be 365,000 units (350,000 private, commercial and tractors and 15,000 Government vehicles). The parc is also believed to have a 15 year span.

5.6. Morale is very low in the components industry as shown by three manufacturers who questioned their future; one (the filter manufacturer) had already advised the Ministry and Unions it was closing operations.

5.7. There was some evidence of exporting but it would be true to say that most manufacturers had not exploited the benefits of lower import duties within the PTA countries.

5.8. The problem of illicit importation of parts makes the task of the franchised dealer very difficult particularly as he has to apply through licences with lead times up to 15 months from Japan. The illicit importer obtains his supplies in a fraction of that time.

5.9. Very little evidence of Zimbabwe imports because Kenya is similarly highly industrialized; in fact Zimbabwe could make use of Auto Spring's ability to manufacture wiring looms.

TANZANIA

Visited between 26 - 29 October 1992.

1.0 General

1.1	Area	945,087 sq km, including the islands of Zanzibar and Pemba which are 36 kms off the mainland coast of Tanzania. The mainland has a low lying coastal plain which is from 16-22 kms wide and a very large mainly arid central plateau, about 1200 m above sea level. The most fertile areas are the highlands in the north and south west of the country, the coastal areas near Tanga and the shores of Lake Victoria. Tanzania is bordered by Kenya, Lake Victoria and Uganda in the north, by Rwanda, Burundi and Lake Tanganyika in the west, Zambia, Malawi and Lake Malawi in the south-west, Mozambique in the south and the Indian Ocean (800 kms coastline) in the east.
1.2	Population	24.3 million (1989 estimate) of whom about 600,000 live on the island of Zanzibar and Pemba. The African population is estimated to be over 98% of the total and the rate of growth is 3.3% pa. The capital city is Dar-es-Salaam, population of about 1.6m with main towns of Zanzibar (capital of the islands of Zanzibar and Pemba) around 300,000, Tanga, a port in the northern highlands area around 170,000, Arusha 150,000, Mwanza around 205,000 and Dodoma in the centre of the country with about 190,000 people.
1.3	Roads	82,000 kms - of which 10,000 kms are trunk roads and only 3,000 kms paved - most of which require rehabilitation. Road transport accounts for about 60% of total internal freight traffic.
1.4	Railways	6,600 kms of rail road
1.5	Air	Two international airports at Dar-es-Salaam and Kilimanjaro and about 50 domestic air fields.
1.6	Supply Rates	Through the three major ports, Dar-es-Salaam, Mtwara and Tanga and by road routes to Zambia, Malawi and Burundi.

2.0 Economy

2.1 Exchange Rate — Continuing devaluation as part of a flexible exchange rate policy.

	3/91	12/91	3/92	6/92	23/10/92
TSh-US$	204	232	288	300	330

2.2 GDP — US$ 2740m (1988) GDP per capita US$ 114 (1988). Estimated to have grown by 4.4% in 1989 up from 4.1% in 1988. The 5 year plan, April 1989, aims to achieve annual GDP growth of 6% by 1992/93.

2.3 GDP Sectors — Agriculture, employing about 90% of the labour force accounts for 47% of GDP and 80% of export earnings. The major export is coffee (26%), other cash crops are cotton (24%) tea, cashew nuts, sisal and tobacco. Food crops are maize, cassava and rice. Manufacturing accounts for 8% of GDP. Government expenditure due for reduction in 1992 with announced reductions of 10,000 in the Civil Service.

2.4 Inflation

	1986	1987	1988	1989	1990	CURRENT
%	33.3	29.9	28.2	23.8	35.0	20.0

Current bank rate is 31%.

3.0 Trade

3.1 Policy — Strongly supported by the IMF and the World Bank, the Open General Licence Facility for Exports was announced in 1988. Member of the PTA and SADCC. In the 1992 Budget, industrial production is to be stimulated by abolition of customs duty and sales tax on industrial raw materials, farm implements, large buses and trucks, human and veterinary medicines. Abolition of excise duty on locally produced sugar, textiles, clothing and cement. Also corporate tax on local (and joint venture) and foreign companies lowered by 10%.

3.2 Direction of Trade — Kenya is by far the largest supplier from the PTA countries (65%) with Zimbabwe only 7%. Tanzania's exports to PTA countries majored again on Kenya (45%) with Zimbabwe only taking 7%.

4.0 Visits

With the assistance of the UNIDO JPO and a local entrepreneur, Mr. Ramesh Patel, 7 visits were made in the 4 days to 3 government authorities and to 4 commercial operations, all in the Dar-es-Salaam area.

4.1 Ministry of Industry and Trade - Acting Director - Heavy Industries

All saloons (mostly by Japanese), pick ups and trucks up to 5 tons are imported CBU. SKD is reserved for heavier trucks through 4 assemblers for Scania, Isuzu, Leyland DAF and Land Rover with bus building at Quality Group Ltd. Other trucks are Mercedes, Fiat, Nissan, Mitsubishi and Hyundai. New trend in importation of used and MOT rejected models from Japan through Afrocarriers. All steel on OGL, the National Steel Corporation (parastatal) being a major importer in Tanzania. All pressings for body building imported - very little press capacity. Adequate foundry capacity. Components made in Tanzania include tyres (General Tyre), exhausts, leaf springs, oil filters, electric cables, rubber products, radiators, auto bulbs and shock absorbers (under licence).

4.2 Comafric Ltd

A very successful importer and retailer of automotive components established 60 years. The holding company has more than 10 subsidiaries, turnover in order of US$ 10m pa. Agency for International Harvester, Case Poclain and Vibromax. Has 4 shops, all in Dar-es-Salaam. There are 70 models in Tanzania car parc. Imports all electrical parts from Far East. Unhappy with locally made filters and leaf springs. Water pumps and all cooling products imported. Retails many products made by own group companies - see Afrocooling and Automec.

4.3 National Insurance Corporation

The only way to obtain size of vehicle parc as Bureau of Statistics kept no records. A consultancy firm had been retained to resurrect Registration Statistics.

The figures for 1991 were as follows (1990 being almost the same and 1989 totalling 6000 more).

	(000)
Cars	
Light commercial vehicles (pickups)	13.4
Commercial vehicles	11.4
Buses	7.3
Tractors, Construction vehicles	5.6
Motorcycles	6.4
	90.6

It was felt that the figures might be understated by 10% due to possible non insurance.

In addition, opinion elsewhere suggested Government vehicles amounted to 12,000 in 1986, making an estimated total of 112,000 vehicles.

4.4 Tasia Group of Companies
Tanzania Spring Industries and Autoparts Limited

Has licence to blend, package and market through all SADCC countries two leading brands of automotive chemicals.

- Automotive Products (Lockheed) UK - Brake fluid
- Lloyds Chemicals - Radiator flush/welding fluids and other chemicals.

Also has total glass blowing and manufacturing facilities for 6/12/24V. automotive bulbs. Could make 16,000 per 8 hours shift. Tanzania's demand was no more than 2,500 per day.

Manufactures oil and fuel filters, range covers 80% of the vehicle parc. Uses German filter paper (as does Crosland, Zimbabwe). Passed by Tanzania's Bureau of Standards. Can make 4,000 per day, about twice the possible demand.

Manufactures CV leaf springs (steel imported from Japan) covers entire range and makes for Scania (OE) assembly.

The above manufacturing and quality capabilities should be noted when supply and demand within PTA and SADCC countries is discussed later.

4 5 State Motor Corporation -
Director/Planning and Development

Parastatal established in 1974 to allow state to control the importation of vehicles and to ensure a planned standardisation of models. 3 major roles:-

1. Confinement - model routing to assembly plants, importation.

2. Development - conceive, initiate and implement projects - tractors, trailers and after sales.

3. Organise - the trading function to generate income for operations.

As well as the assembly plants, Land Rover reconditioning and various vehicle body and freight forwarding subsidiaries, there is a joint venture company, Karadha (SMC 20%, National Insurance Corporation 20%, National Bank 60%) which provides finance for vehicle importation, project investment and customer service.

4.6 Automec Ltd

Subsidiary of Comafric and involved with SMC (see 4.5). Full refurbishment of engines, gearboxes, rear axles (truck and trailers), clutch units, relining of brakes and renovation of wheel hubs. Also a wide variety of panel and body work and the manufacture of Scania OE truck bumpers for the assembly plant.

4.7 Afro Cooling Systems Ltd

Subsidiary of Comafric Ltd (see 4.3). Manufactures 150 radiators per week, more if needed in a wide (1600) variety of applications. Also manufactures heat exchangers to customers' own patterns. Nearly half of production goes to export - Scania (Sweden) Bearmark/Land Rover (UK). W. Dahmer (Bus manufacturer, Zimbabwe), also tc Zambia, Malawi, Mozambique and Sudan. Covers all makes in Tanzania - Land Rover, Massey Ferguson, Leyland DAF, Fiat, Tata and Ford.

5.0 General

5.1 UNDP Report DP/RAF/88/073 O. Kraemer and I. Sejersen. Spare parts production in Tanzania Jan/Feb 1991 referred not to the Automotive Industry but to machine tools and to manufacturing companies covering a wide range of products such as tanneries, saga, textiles, tyres, brewery, pasta, soap and matches.

5.2 The ten manufacturers visited employed 9,032 people, had turnover of US$68.5m (for 8 companies) and had a spares requirement at US$1.85m pa. They all repaired their own machinery but highlighted distinct problems and shortages in producing gears, shafts, stainless steel parts, bushes and springs.

5.3 They requested assistance on foundry services, heat treatment, materials specification, gear production knowhow, stock of tool and stainless steels.

5.4 They claimed that they suffered if they used suppliers of spare parts - down time, quality and prices.

5.5 Eight metals forming and machine tool companies were also visited. Joint turnover US$ 1.48m. There were 4 foundries including the Kilimanjaro IDC, Moshi and 3 heat treatment companies.

5.6 All seven companies identified severe shortcomings such as problems identifying steel, chemical composition of scrap, stock of proper tool steels and quality control.

5.7 The combined findings were:-

5.7.1 Lack of spare parts - 10% machine utilisation lost through lack of spares.

5.7.2 Power failures, lack of gas, raw materials, money for raw materials and lack of market demand.

5.7.3 Lack of adequate plastics injection moulding machinery.

5.7.4 Lack of gear cutting knowledge, spark erosion technology and heat treatment facilities and knowledge.

5.7.5 Poor quality sand castings.

5.8 The report concluded that the industry needed:-

5.8.1 Tool room facility - for producing plastic injection moulds for the plastics industry and for other producers of plastic parts.

5.8.2 Metallurgical laboratory

5.8.3 CAD (Computer Aided Design) equipment

5.8.4 Special steels to be made available

5.8.5 The establishment of an industry centre to house the above facilities and services.

5.9 The cost of these requirements for a small segment of Tanzanian industry would be US$ 1.6m

6.0 Summary

6.1 There are at least 70 different models in the vehicle parc - either imported in CBU or SKD from Japan, or Europe. In addition there are the new "grey imports" of Japanese secondhand (rejects) of unknown specification.

6.2 The vehicles parc of around 112,000 units was reasonably old and kept active the vibrant parts aftermarket.

6.3 The ability to manufacture certain components - radiators, leaf springs, oil and fuel filters, auto bulbs, high quality brake fluid, exhausts and steering and suspension parts - makes Tanzania self-supporting and able to produce enough for export.

6.4 The lack of steel, good quality casting processes and general press capacity is a major short fall.

6.5 The need for laboratories and technology assistance in one industry is noted and should be highlighted as a need also for the automotive components sector - whether in Tanzania or in combined PTA countries.

ZAMBIA

Visited between 19 - 25 October 1992.

1.0 General

1.1	Area	754,660 sq km. Mainly high plateau; around half of country is bushland. Predominance of mining with secondary industry of farming - cattle, maize, cotton, sugar and groundnuts. Landlocked, bordered in the south by Zimbabwe and Namibia, in the south east by Mozambique, in the east by Malawi, in the north east by Tanzania, in the north and north west by Zaire and in the west by Angola.
1.2	Population	8 million (1990 estimate) Annual rate of increase 3.7%. Urban population accounts for around half the total. The capital Lusaka has a population of around 921,000, Livingstone 103,000 and Kabwe 208,000 and in the copper belt Kitwe has 495,000, Ndola 468,000, Mufulira 207,000 and Chingola 202,000.
1.3	Roads	38,200 kms. All main roads are bitumenized but quality is deteriorating.
1.4	Rail	Very limited - 1050 kms.
1.5	Air	International airport at Lusaka and internal flights are available to main cities and towns such as Kitwe, Livingstone and Ndola.
1.6	Supply Routes	Principal supply routes through Dar-es-Salaam (Tanzania), South Africa and Mozambique.

2.0 Economy

2.1	General	In General Elections on 31 October 1991 a new MMD (Movement for Multi-Party Democracy) Government headed by the President Mr Frederick Chiluba came to power. Negotiations with aid donors and IMF led to a Structural Adjustment Programme (SAP), tax changes and devaluation of the currency by 30%. Business conditions are difficult with tight liquidity and high interest rates, currently 60%. The foreign exchange system has been freed up by the establishment on 15 October 1992 of

Bureaux d'Echange which has encouraged the expansion of trade. SAP and the budget has been thrown off course by the drought which has drastically reduced food production necessitating imports worth about US$ 300m. Donor support has been generous but the financing gap for 1992 remains at around US$150m. The Government remains committed the programme. On 19 October 1992 the German government announced that it had cancelled Zambia's last debt with it for over K22 bn (US$ 71m) and agreed to reschedule about 50% of all commercial loans. Privatisation of most parastatals remains a key element in the restructuring programme, 17 organisations have been highlighted for the first stage of the programme.

2.2 Exchange Rate

Devaluation has taken its toll.

End	1988	1989	1990	1991	1/5/92	10/92
K/US$	10.00	21.65	42.74	89.29	135.46	210.60

K = Kwacha

2.3 GDP

Real GDP growth has developed into a negative factor from +5.5% 1988 to nil 1989 - 1.9% in 1990, - 1.0% in 1991 and forecast - 4.0% in 1992. GDP in 1989 was US$4700m with per capita GDP at US$603.

Total external debt is currently estimated at some US$8bn which, on a per capita basis, is one of the highest in the world.

2.4 GDP Sectors

Manufacturing contributes around 20% to GDP and caters essentially for the domestic market. Agriculture 15% of GDP mainly subsistence but some commercial.

Industry 17%. Encouraged by Government through Zimco, a wholly owned Government holding company. Its share of manufacturing output exceeds 50%. Includes cement, bricks, chemicals, textiles, wood and rubber products.

Mining 14% - most important is copper which earns over 90% of Forex. Also cobalt, zinc, lead, coal, emeralds and uranium.

Unemployment is increasing rapidly from 51% in 1988 to nearly 90% if subsistence farmers are included.

2.5 Inflation

Increasing from estimated 59% in 1988 to 118% in 1991 to possibly 200% currently.

3.0 Trade

3.1 **Policy** — Zambia is a member of SADCC, the PTA, the IMF, the African Development Bank, the OAU and is a signatory to the Lomé Convention between the EEC and the African, Caribbean and Pacific group of states. Also a member of GATT.

3.2 **Direction of Trade** — Very diversified. Major suppliers (1988) Saudi-Arabia 21.7%, South Africa 19.7%, UK 16.2%, USA 9.8%, Japan 5.5%, Germany 4.6%. Major export markets Japan 32%, Italy 9%, France 7%, Belgium and India 6% each, and USA 5%.

4.0 Visits

With the assistance of the UNIDO JPO and the PTA Headquarters Staff, 13 visits were made in the 5 days to 5 Governmental and Trade Authorities, 4 vehicle distributors, 2 commercial operations and 2 fleet operators, all in the Lusaka area.

4.1 Headquarters, Preferential Trade Area for Eastern and Southern African States (PTA) Lusaka.

Continues to aim to achieve the key objective of increasing the range and volume of engineering and automotive components being made within its member countries. (see Appendix 17). Eight PTA countries are also members of SADCC - Tanzania, Zambia and Zimbabwe being three within the scope of this mission.

4.2 Engine Reconditioners of Zambia Ltd.

Largest engine reconditioner (around 80% market share) turnover around US$ 4m pa - with 9 branches. Also retails full range of automotive parts through 7 branches with 1 branch (Lusaka) acting as a wholesaler. Purchases majority of supplies from Africa. Champion spark plugs from India at US$ 0.70 against those from South African and Kenya at US$ 1.25. Finds doing business with suppliers in Zimbabwe very difficult - poor delivery times, poor quality, high prices and poor after sales services. Used to purchase chemicals and steel from Zimbabwe but no longer. Not very hopeful that components from Zimbabwe would find a ready market in Zambia.

4.3 Motor Holdings Zambia Ltd.

Owned by Lonrho, who also own Rover (Zambia) Ltd, Ndola, one of the 4 vehicle assemblers in the country, which assembles (and refurbishes) Land Rovers, and assembles Toyota Hilux, VW, Audi and Mitsubishi models. Purchases Pilkington, Zimbabwe glass. As expected it was stated that economies of scale would not make Zimbabwean production worthwhile. Could not compete on quality, price and delivery against UK, Germany and

South Africa. Within a year 90% of Toyota and VW will come from South Africa. Land Rover also comes from South Africa, where the local content rule is moving from 60% weight to 70% value. Shipping costs from Japan US$3000 delivery 4 - 7 months and from South Africa US$500, only 4 weeks for 1000 miles. Leading manufacturers such as Champion (spark plugs), Bosch (electrical), SKF (bearings) are in South Africa and can supply all their market requirements with spare capacity for the whole of Africa.

4.4 Marunouchi Manufacturing and Distributing Co. Ltd.

Represent Mitsubishi. Concentrate on trucks and pick ups 3-50 ton. CKD Kits assembled by Rover (Z) Ltd. Does have local content - paints (ICI and Vitretex), tyres (Dunlop) and batteries (Chloride) plus Pilkington Zimbabwe glass. Also purchases trailers from Zimbabwe but main complaint of lack of two way trade with Zimbabwe through customs/import difficulties.

4.5 Zambia Confederation of Industries and Chambers of Commerce - Chief Executive

After 27 years of state controls, monopolies and inefficient management, the Third Republic has made a policy statement of liberalisation of trade and commerce. Will result in privatisation of many parastatals and business leaders view the future with confidence. Also have great hopes for free trade with neighbouring states. Forex no long a problem with 100% Retention Scheme provided that the goods are not copper or copper related.

4.6 Ministry of Power, Transport and Communications - Road Traffic Commissioner

Lacked records of market size and was only able to produce figures for new registrations for 10 years 1982/91 which ignoring thefts, personal exports and cannibalization gives a rough guide of the vehicle parc. (See Appendix 8). Resulting in 57,832 cars and pick ups, 6,724 trucks and mechanical horses, 2,736 buses, 2,095 tractors, 11,556 motorcycles and others making 83,700 units.

No records exist of the government vehicles stock but based on Botswana's figures, assume an additional 7,500 vehicle, making an estimated grand total of 95,000 (reduced by shrinkage but increased by vehicles over 10 years old).

4.7 Duly Motors (Zambia) Ltd.

Franchises for Ford, Fiat, Mazda, AVM trucks and Ford tractors. Central Parts Department serves 80% to their own workshops and 20% to outside customers. Purchases from Zimbabwe windscreens, AVM chassis and ox-drawn ploughs. Would increase imports from PTA if Forex and demand available.

4.8 Ministry of Works and Supply - Permanent Secretary

Trade must be two way e.g. they purchased steel from Zimbabwe's Zisco but when they tried to export to Zimbabwe the customs difficulties were destructive. Therefore Zambia has opened up a trade mission with South Africa. Would like to see an "African Model" such as the rugged Peugeot or Renault; felt that the Japanese models not suitable for African conditions.

4.9 Ministry of commerce and Industry - Director of Industry

Felt that PTA should give a greater lead, get national borders freed up and that those countries given responsibilities within PTA - Zimbabwe for agriculture, Zambia for mining, Malawi for fisheries and Tanzania for manufacturing - should do more to achieve results.

4.10 Automotive Equipment Ltd

Large parts retailer. Turnover around K10m pa. Specialises in Mazda, Toyota, Nissan, Land Rover, L yland and Mercedes car and truck parts, purchases from South Africa, UK, Japan, Taiwan, India and Germany. First priority is price and then availability. Purchases auto bulbs and filters from South Africa, many quality brands such as Ferodo, (brake and clutch) Armstrong (shock absorbers) and AE engine parts. Has no Forex problems. South Africa gives him efficient service, good prices and delivery - "they want business". Zimbabwean suppliers "do not want to sell", the filters from Morhen are poor quality as are the exhaust systems from Centreflex. Purchases exhausts from Bosal, South Africa. Does purchase windscreens from Pilkingston (Zim) but poor sales service. Obviously his opinion of trade with Zimbabwe is very poor.

4.11 Contract Haulage Ltd - Parastatal

Largest haulier in Zambia. 142 Volvo and Leyland DAF trucks and 150 trailers, 3 workshops. Purchases all major parts from original truck supplier but service items are procured locally. Found it was impossible to do business with Zimbabwe - customs procedures and currency and immigration problems suffered by his drivers trucking through the border posts even when the company had an office in Harare. Had noticed that goods carried were no longer including Zimbabwean butter, soap, steel and baby milk products; this was evidence of Zimbabwe's trade barriers.

4.12 United Bus Company of Zambia Ltd - Parastatal

Largest bus company covering whole country but not the cities. Southern Division has 178 buses (91 Leyland DAF, 60 Tata and 24 AVM) but 56 (31%) non operational through lack of spares, 37 of them being the Tata units. Th same situation is apparent in the Northern Division with 180 buses.

Problems are caused by import and forex limitations on spares mix - the supplier never has what is needed. Had had good experiences on parts supplies from Radiator and Tinning Ltd and United Spring and Forging Ltd, both of Bulawayo, where the products are to a better specification than those from South Africa. Was hopeful of increasing business with Zimbabwe to the detriment of local suppliers.

4.13 Mobile Motors Zambia Ltd

Importer for Toyota, which is market leader with sales in 1991 of around 60% of total. Vehicles mainly come from Japan, through South Africa in CBU form, but the Toyota Hilux comes in CKD form for assembly at Rover, Ndola. Purchases glass from Pilkingston Zimbabwe, whose price is very attractive at US$80 delivered compared to that from Japan at CIF US$160. Could not see Zimbabwe being able to attract business away from South Africa.

5.0 Summary

5.1 Zambia has four assembly plants.

- Livingstone Motor Assemblers (owned 30% by Fiat, 35% by Indeco (Zambia) and 35% by Zambia National Holdings (Hotels Group) - Fiat, Mercedes, Mazda 323, Peugeot 504, Isuzu Pickup.

- Rover (Zambia) Ltd, Ndola - Land Rover and refurbishment, Toyota Hilux, Mitsubishi, VW and Audi.

- Leyland Motors - Lusaka. SKD Leyland DAF, Mitsubishi Fuso and Mercedes Trucks.

- Tata (Zambia) Ltd. Ndola - Buses.

5.2 The vehicle parc is estimated at 95,000 units in reasonable condition with predominance of Toyota, Nissan and Mitsubishi in cars and pick ups and Leyland DAF, Mercedes and Volvo trucks. Vehicles mainly from Japan or South Africa and are different to those in Zimbabwe.

5.3 Very good trade relations with South Africa with considerable evidence of ease of doing business, good pricing and quality.

5.4 Very strong feeling about Zimbabwe's attitude to imported goods relating to Governmental restrictions on currency, import documentation and difficulties at the borders. To quote - "Zimbabwe wants it all one way".

5.5 Reluctance by Zambians to agree that Zimbabwe's products were competitively priced and high quality.

5.6 Some evidence of good trade relations and products from Zimbabwe, which will need considerable marketing effort to encourage.

8. Strategies

8.1. Continue the existing situation

It could be said that industries find their own level and solve their own problems; that if there is enough skill and business acumen then organisations will recognize shortcomings and will redress the balances. However, sometimes governmental, economic or physical adverse influences are stronger than the desire to produce engineering solutions and the industry just has to accept these shortages by resorting to importation, e.g. light bulbs in Zimbabwe.

Considering the number of studies carried out on the components industry in Zimbabwe there is definitely a great interest in expanding the automotive economy, and at times (as shown in the Commonwealth Secretariat Report 1986) recommendations are translated into action and create savings and benefits to the industry and society.

The weight of evidence within Zimbabwe demonstrates that many improvements, both short and long term, are necessary and that the economy and the current drought and man made problems need leadership from the Motor Industry sector.

8.2. Reorganisation

8.2.1. Economies of Scale

It is necessary to consider economies of scale within Zimbabwe and the rest of the PTA Countries.

It is doubtful whether there are more than 2 million vehicles in all 19 actual and potential countries within the PTA membership, even considering any incorrect assumptions and outdated figures, as found by discussion and research on this mission. There are over 4.5 million vehicles in South Africa, which puts the vehicle population of the PTA countries into perspective. South Africa has one market with a large variety of models. The PTA has 19 separate markets, all with different models, sourced from different continents eg. Toyota - from CKD kits from Japan and South Africa, CBU from South Africa and Japan and perhaps direct imports from Europe; all with possible different specifications and aftermarket requirements.

A report/paper by A.K. Mitra - Recent Trends of Foundry Industry in the African Region. Its Constraints and Future. 2nd National Conference on Foundry Technology. November 1991, pointed out that there are around 45 foundries in Zimbabwe, 10 in Kenya, 20 in Uganda, 22 in Tanzania, 26 in Nigeria, over 40 in Egypt - but over 100 in South Africa.

It therefore means that, in whatever industry, any one country will have limited resources.

- capital
- Foreign Exchange
- managerial skills
- pattern (or tool) making
- technical sales and marketing facilities
- lack of laboratory support facilities at plant level
- lack of exchange of studies and information on possible subregional markets so as to avoid any duplication and further constraints of future development of (foundry) industries, including information on product development, Research and Development and transfer, adaptation and development of technology.

This was also evident in Tanzania where there was an individual country's need for an industry centre to take care of the technological and equipment resources necessary to achieve development objectives.

It is therefore important to consider economies of scale, and the actual size of a particular market, before using resources to manufacture components - manufacture versus importation.

On the other hand, Governmental influences such as Forex Control, might make it imperative to manufacture the component within the country, rather than import it; lack of import licences or a prohibitive import cost making the vehicle inoperable, possibly having a knock-on effect on the economy (drought relief).

8.2.2. Zimbabwe's Components Shortfall

Resulting from many visits and discussions the following components were found not to be available from Zimbabwe's considerable manufacturing resources and could possibly be made within the country:-

Engine components
Axles - driven front and rear
Drive train differential gears
Gearbox internals
Oil seals (Payen, Bulawayo could make these if it could obtain the plant)
Wheels and Wheel Rims - High speed for Commercial Vehicle
Air Suspension - Commercial Vehicle
Brake hydraulics - Car and Commercial Vehicle
Brake discs - car
Seat Foam (see Megh Cushion Industries Ltd., Nairobi, Kenya)
Seat Belts (see Burns and Blane Engineering, Nairobi, Kenya)
Wiring Looms (see Auto Spring Ltd., Nairobi, Kenya)
Lighting (Bulbs and Lamps) (See Tasia Group Lusaka, Zambia)
Engine Test Equipment
Garage Equipment

The most complete list is the one used by the Zimbabwe Motor Trade Association to discuss with Government which items should be placed on Open General Import Licence (OGIL). See Appendix 11. Inclusion on the list does not mean that those components in general are not being manufactured in Zimbabwe; it means that some or all the components only fit some of the vehicles and therefore should be permitted for importation.

8.3. Joint Ventures

One of the major aspects of this mission has been to examine the opportunities for a Joint Venture partnership between Zimbabwe's Motor Components Industry and an international manufacturer who has the technical competence and marketing ability and channels to assist the indigenous industry.

One such manufacturer would be Iveco, part of the Fiat Group, who carried out a study on an industrialization programme for Zimbabwe in October 1989.

Iveco is located at its Turin, Italy headquarters and has plants and licencees in over thirty countries. It is the majority shareholder (73%) in Iveco Ford Trucks, UK; Iveco Pegaso Spain (60%), Seddon Atkinson, UK (60%) and totally owns Iveco Magirus. Germany. Turnover world wide in 1991 was Netherlands Guilders 12.2Bn. (US$7.1Bn). It sold 102,608 trucks and a total of 268,713 engines in 1991.

The project study recognized the existence of local content and would quickly enhance the local capability to increase this through the most appropriate technical assistance. Iveco would actively support Zimbabwe's manpower development through a training programme carried out both in Italy and Zimbabwe.

Iveco has an iron and aluminium steel foundry and forging subsidiary, Teksid in Turin, founded over 70 years ago, employing 11,000 people and with turnover in 1990 of more than US$1000 million. It makes cylinder blocks and heads, brake discs and drums, crankshafts, connecting rods, cam shafts and many other engine, steering and brake components for Bendix, BMW, General Motors, Chrysler, Cummins, Eaton, Rockwell, John Deere, Lucas, SAME and VM. It is a specialist in transfer of technology to other countries and a tie up with Zimbabwe would be in the national interest. (See Appendix 18).

A list of Iveco's foreign collaborations is shown in Appendix 19.

Additional capital may be available from such organizations as the Commonwealth Development Corporation, which has an office in Harare. The CDC makes commercial loans available with cover for forward repayment (gross cost around 20%) on the condition that the enterprise has local ownership and that the enterprise becomes totally locally owned within 8 years. The CDC has a portfolio worth £65m and currently does not have any projects involving the Motor Industry in Zimbabwe.

9. SUMMARY AND RECOMMENDATIONS

9.1. Economic

Zimbabwe's National Plan recognises the absolute need for the country to encourage the manufacturing sector as it already accounts for around 25% of the GDP. It is projected in the Plan that the manufacturing sector will grow at an average rate of 8.8% over the five years. Exports of consumer goods are expected to grow at 2% each year.

Many factors are in place to assist this growth

- Open General Import Licence (OGIL)
- Export Retention Sector (ERS)
- Plans for an Export Credit Guarantee Scheme
- Zimbabwe Investment Centre (ZIC)

On the other hand many manufacturers meet extreme difficulties importing raw materials that may be cheaper and better quality than exist within the country; and also plant and machinery for vital new products and processes.

9.2. Manufacturing Ability

There is no doubt that there is a very great pool of skill and ability in the manufacturing sector. Anything and everything can be manufactured.

What needs attention is:

- Pricing
- Quality
- Marketing

Potential export customers met in other PTA countries needed persuading that Zimbabwe was serious on pricing and quality. Teamtec of Bulawayo, who is now concentrating on exports, demonstrates that quality is a key factor by using the Standards Association of Zimbabwe mark, and that they recognize the importance of pricing with their export prices (section 6.4).

Marketing ability in Zimbabwe is almost non existent. There were many examples of companies ceasing to make an item once they had satisfied an immediate requirement instead of finding new customers for the same application and reducing the cost base with larger production runs.

There was also a strong manufacturing ability in Tanzania and Kenya and these countries are not going to allow Zimbabwe a special right to supply them. In fact in two examples found - light bulbs in Tanzania and wiring looms in Kenya, the reverse is true - that those countries could easily supply Zimbabwe, and the rest of PTA, with all their requirements of these products.

There is a great need for metallurgical and engineering leadership that could be given by a regionalised Metallurgical Centre. Tanzania highlighted the need for one and Zimbabwe demonstrated its shortcomings in the area of foundry laboratories. It would be far better to pool resources and therefore be able to create a "centre of excellence" rather than have each country trying to do what it can within its limited resources.

9.3. Economies of Scale

This is a key factor in any decision concerning manufacture.

The market size of the entire PTA is around 2 million vehicles, of all makes, models and specifications. There is also the effect of South Africa to consider. What will all the South African engineering talent be doing if and when the vehicle manufacturers retrench to Europe and Japan?

The possibility of a Joint Venture operation is very attractive, especially when the facilities of technology exchange and training, and of a greater market through well recognised export routes, are considered.

9.4. Finance

The Government of Zimbabwe recognised the need for reorganization or development of the automotive components manufacturing sector and would probably encourage the Zimbabwe Investment Centre (ZIC) to become involved and would welcome the input by the Commonwealth Development Corporation (CDC) or a UNDP initiative.

Therefore the following recommendations are made:

9.5. Short term : Immediate Action

9.5.1. Zimbabwe's automotive component manufacturers have got to get their house in order in the areas of quality and marketing.

They must seek to find satisfactory solutions to their relationship difficulties with the Standards Association of Zimbabwe. If the SAZ does not know what standard the manufacturers should achieve then there are world famous engineering companies like Perkins Engines Ltd of Peterborough UK who, on a fee paying basis, could set quality standards for a world standard engine component, for instance. This facility could be carried out in conjunction with the SAZ's existing work within ISO 9000, and their relationships with the South African Bureau of Standards, the British Standards Institute and the other Bureau of Standards in countries like Kenya and Tanzania.

It is therefore suggested that a formal private sector body should be created, perhaps on the lines of the UK's Society of Motor Manufacturers and Traders (SMMT) Component Manufacturers Section - which should consist of members from:-

1. Manufacturers
2. Motor Trade Association
3. Fleet Operators
4. Vehicle Importers/Dealers
5. Vehicle Assemblers
6. Government Representative - Ministry of Industry and Commerce
7. The Standards Association of Zimbabwe.

This would create a body that would represent all sectors of the components industry and its users and would enable a consensus of opinion and action to be effected.

9.5.2. Serious consideration should be given to improved marketing criteria in the industry. Trade Fairs and exhibitions should be encouraged.

9.5.3. A PTA Regional Metallurgical Centre should be created to give leadership and service in the area of steel and foundry technology, heat treatment, materials specification, tool room and CAD technology and in general engineering techniques and resources.

9.6. <u>Medium Term : Within 1 year and covering 5 years</u>

It was very disappointing to observe the attitudes and opinions that were declared when the subject of the PTA was raised in all the countries. It is obvious that some further self promotion of the PTA Secretariat should occur and that member countries should be encouraged to "think PTA".

The PTA held a conference on Automotive Spare Parts for Buyers and Sellers at Harare in May 1991 which was supported by the President of the Confederation of Zimbabwe Industries, the Ministry of Commerce and Industry of Zimbabwe, the Secretary General of the PTA, the Zimbabwe National Chamber of Commerce, the PTA Trade and Development Bank, the PTA Clearing House and UNDP (Harare).

Many participants came from PTA countries and it was disclosed that there is industrial capacity within PTA countries to produce over 1200 components for a motor vehicle ie about 9% of the total vehicle.

It was agreed that much more should be done to encourage intertrading within PTA member countries.

It appears that very little has been done to foster relationships since that meeting.

9.6.1. It is therefore recommended that the PTA (and perhaps in conjunction with SADCC) should renew its intention to encourage trading between member countries, particularly in the sector of automotive components

9.7. <u>Long Term : within 1 year and covering 15 years</u>

9.7.1. **A feasibility study** should be carried out to examine the possiblities of the PTA Region setting up a Metallurgical Centre to give leadership in the areas of technical and resources development.

9.7.2. Also the role that can be played by a Joint Venture operation such as that described for Iveco should be considered. Certainly Iveco has the experience to transfer technology and assist in the development of Zimbabwe's industrial infrastucture.

Obviously before they would be prepared to invest resources in such a project a **feasibility study** would need to be carried out, without delay, but the early indications from their initial report in October 1989, reinforced by the visit of 5/6 November 1992, is that they have a strong interest in becoming involved in Zimbabwe's automotive components industry.

10. BIBLIOGRAPHY

- Doing Business in Zimbabwe - Price Waterhouse 1990.
- Agri Motor Industry Review, Zimbabwe - Coopers & Lybrand Associates 1989.
- Second Five Year Development Plan 1991-1995 Zimbabwe - December 1991.
- Department of Trade and Industry (UK) Fact Sheets and Detailed Information 1990-1992
- Country Capability in Zimbabwe relating to Machine Tool Manufacture, IDC July 1989.
- Department of Physical Planning, Transport and Road Research Laboratory, Zimbabwe.
- Zupco Harare Division Buses - Operational and Financial Trends Annual Performance Report 1976 - 1991/2 June 1992
- Report on the Maintenance Costs and Productivity of Zupco, Zimbabwe Harare Division Buses, Working Paper No.31 May 1992
- A Survey on Foundries in Zimbabwe - A.K.Mitra, UNIDO/ZDC October 1989
- Development of Local Content of Motor Vehicle Assembly, Zimbabwe.
- Commonwealth Secretariat, Commonwealth Fund for Technical Cooperation, IDU February 1986.
- Report/Paper - Recent Trends of Foundry Industry in the African Region.
- Constraints and Future, A.K. Mitra, Institute of Foundrymen, Zimbabwe, November 1991.
- Zimbabwe - a report on a visit by H.G.Owen, Society of Motor Manufacturers and Traders (UK) February 1991.
- Spare Parts Production in Tanzania - O. Kraemer and I.Sejersen. UNDP Report -DP/RAF/88/073 January/February 1991.
- Kenya - a report on a visit by HG Owen SMMT (UK) February 1991.
- South African Official Directory of the National Association of Automotive Component and Allied Manufacturers 1991.
- Report on PTA Conference for Automotive Spare Parts ITC May 1991.

APPENDICES

ZIMBABWE REGISTERED VEHICLE POPULATION STATISTICS

EXCLUDING GOVERNMENT VEHICLES AND AGRICULTURE TRACTORS

TAX CLASS	DESCRIPTION OF VEHICLE	JULY 1980	AUGUST 1981	JULY 1982	JULY 1983	AUGUST 1984	JULY 1985	JULY 1986	JULY 1987	AUGUST 1988	AUGUST 1989	AUGUST 1990	MAY 1991
1	LIGHT MOTOR VEHICLES UP TO 2300 KG NET MASS	216729	221536	227619	242592	248967	244390	260121	265871	276349	285139	290281	296361
2/1	HMV OVER 2300 KG UP TO 4600 KG NET MASS	6923	7143	7307	7801	8161	8414	3594	8813	8936	9132	9115	9251
2/2	HMV OVER 4600 KG UP TO 9000 KG NET MASS	8527	9309	10072	11823	12936	13642	14180	14557	14958	15519	16293	16924
2/3	HMV OVER 9000 KG NET MASS	868	891	923	1024	1122	1195	1252	1283	1340	1408	1547	1630
3/1	MOTOR CYCLES UP TO 70cm³	4866	5175	5259	5497	5542	5562	5599	5639	5697	5730	5569	5594
3/2	MOTOR CYCLES OVER 70cm³	12060	14845	15924	17872	18805	19972	20613	21303	21837	22125	22245	22706
4/1	LIGHT TRAILER UP TO 550 KG CAPACITY INCL. CARAVANS, BOATS, ETC	20499	21352	22200	23247	23758	24446	25146	25911	26726	27537	28274	28832
4/2	HEAVY TRAILERS	7081	7903	8586	9818	10469	11100	11545	12044	12817	13561	14840	15408
5	TRACTOR & CONSTRUCTION VEHICLES	4340	4731	4916	5393	5695	5826	5905	6014	6280	6572	6793	6876
6	VEHICLES NOT ELSEWHERE CLASSFIED	80	94	165	166	163	167	184	196	214	220	245	264
	TOTALS	281973	292979	302086	325144	335618	344718	353139	361631	375154	386943	395202	403846

ZIMBABWE VEHICLE PRODUCTION

	Passenger cars	LCV	HCV	4 x 4	Tractors	Buses	Rebuilds (Land Rover)	Total
1981	8195	4467	985	277	-	305	-	14229
1982	9511	4151	873	601	-	250		15386
1983	6319	3561	998	730	-	190		11798
1984	3663	2126	750	390	-	170		17099
1985	2821	1531	710	231	86	160	50	5589
1986	2710	1119	561	204	662	105	100	5461
1987	1036	1120	384	181	736	85	20	3562
1988	1031	2200	338	275	736	125	121	4826
1989	2813	2406	676	373	761	265	38	7332
1990	2342	2017	983	182	424	295	4	6247
1991	3067	2894	1390	295	655	240	-	8541
TOTAL	43508	27592	8648	3739	4060	2190	333	90095

Source: Figures from the Willowvale, Leyland Mutare, and W Dahmer Assembly Plants

BOTSWANA

Table 2.10 PRIVATE MOTOR VEHICLES : NEW REGISTRATIONS BY TYPE AND MAKE OF VEHICLE IN 1990 (DRAFT)

Make of Vehicle	Cars	LDVs (1)	Trucks <5 tonne (2)	Trucks >5 tonne (2)	Mini Buses (3)	Other Buses	Motor Cycles	Tractors	Trailers	Tankers & Horses (4)	Others	Total	Total (1989)
Bedford	3	5	102	16	0	0	0	1	0	1	1	129	168
BMW	276	7	0	1	0	0	2	0	0	2	0	289	334
Chevrolet	51	44	28	4	1	0	0	0	0	0	0	128	289
Datsun	185	148	18	1	24	3	0	1	0	1	1	382	1,464
Ford	406	557	70	6	5	3	0	59	0	2	10	1,118	1,240
Honda	72	4		2	0	0	94	0	0	0	0	173	187
Isuzu	6	516	70	7	34	5	1	0	0	0	1	640	657
Land Rover	55	60	87	x	1	1	0	0	0	0	2	167	204
Mass. Ferguson	4	0	1	2	0	1	0	267	0	3	0	284	368
Mazda	274	878	27	0	1	0	1	1	0	3	8	1,192	962
Mercedes Benz	319	7	13	54	6	51	0	3	0	45	3	513	560
Peugeot	162	20	0	0	0	0	0	1	0	0	0	183	293
Suzuki	3	2	0	0	6	0	16	0	0	0	0	21	32
Toyota	1,742	3,784	405	181	204	4	0	0	0	11	44	6,375	5,963
Volkswagen	317	32	0	0	49	0	0	2	0	0	1	401	427
Yamaha	2	0	0	0	0	0	58	0	0	0	0	60	84
Other	828	513	197	157	117	27	16	80	788	71	339	3,123	2,431
Total	4,665	6,583	1,009	462	444	75	187	415	788	130	410	15,177	14,653

(1) Light Duty Vehicles up to 1.5 tonnes unladen weight

BOTSWANA

Table 2.12 PRIVATE MOTOR VEHICLES : TOTAL REGISTRATIONS BY TYPE AND MAKE OF VEHICLE IN 1990 (5) (DRAFT)

Make of Vehicle	Cars	LDVs (1)	Trucks <5 tonne (2)	Trucks >5 tonne (2)	Mini Buses (3)	Other Buses	Motor Cycles	Tractors	Trailers	Tankers & Horses (4)	Others	Total	Total (1989)
Bedford	12	86	671	63	8	7	1	3	5	11	9	876	800
BMW	1,235	20	1	3	2	2	15	1	4	3	5	1,291	1,115
Chevrolet	408	503	273	7	1	0	1	0	0	1	3	1,197	1,479
Datsun	1,240	1,502	291	35	192	23	1	2	16	5	8	3,315	5,046
Ford	1,799	2,572	606	67	33	10	5	543	5	46	54	5,743	5,355
Honda	421	19	1	2	2	0	626	0	1	0	4	1,072	1,166
Isuzu	19	1,974	151	53	64	9	5	1	1	3	5	2,387	1,713
Land Rover	152	306	459	3	5	1	0	0	2	2	12	1,034	1.138
Mass. Ferguson	24	27	16	3	8	1	0	2,654	42	10	1	2,778	2,364
Mazda	1,563	2,768	106	2	2	0	2	5	2	3	16	4,471 34	3,336
Mercedes Benz	1,524	44	209	460	33	110	0	47	8	305	13	2,698	2,485
Peugeot	1,011	268	8	1	0	0	1	1	0	0	7	1,297	1,346
Suzuki	19	18	2	0	1	0	153	9	0	0	2	205	219
Toyota	7,206	17,500	2,825	752	760	51	13	11	17	39	109	29,284 23	23,718
Volkswagen	1,495	142	7	0	239	3	0	7	2	2	12	1,593	1,625
Yamaha	5	2	0	0	0	0	322	2	5	1	1	339	290
Other	3,844	1,897	803	748	372	102	93	547	4,454	589	1,279	14,538	10,453
Total	21,978	29,729	6,536	2,139	1,705	319	1,249	3,824	4,567	829	1,547	74,423	63,643

+/-

+16.9%

(1) Light Duty Vehicles up to 1.5 tonnes unladen weight

(2) Trucks more than 1.5 tonnes unladen weight

(3) Minibuses include combies

(4) Mechanical horses

APPENDIX 5

BOTSWANA

Table 2.1 PRIVATE MOTOR VEHICLES: NEW REGISTRATIONS BY TYPE OF VEHICLE, 1976-1990 (DRAFT)

Year	Cars	LDVs (1)	Lorries (2)	Buses (3)	Motor Cycles	Tractors	Trailers	Tankers & Horses (4	Other	Total
1976	311	576	203	31	100	134	60	..	33	1,448
1977	725	1,880	795	73	134	304	236	..	38	4,085
1978	1,480	1,654	812	91	121	376	199	..	57	4,742
1979	1,777	1,617	1,015	132	151	145	233	36	39	5,193
1980	2,568	1,917	1,256	214	301	255	271	34	73	6,889
1981	2,936	2,415	1,240	269	306	325	406	113	94	8,165
1982	2,744	2,083	1,029	244	340	317	420	110	118	7,405
1983	2,842	2,473	1,006	229	393	252	331	81	59	7,666
1984	3,546	2,733	1,138	238	419	208	400	118	93	8,893
1985	3,625	2,495	1,110	223	365	221	415	110	87	8,651
1986	5,199	3,366	1,332	353	334	389	474	162	90	11,699
1987	4,193	3,109	1,156	260	215	342	369	166	91	9,943
1988	4,335	3,968	1,340	330	235	349	473	218	170	11,469
1989	5,202	5,368	1,533	394	229	664	712	181	350	14,693
1990	4,665	6,583	1,471	519	287	415	782	139	410	15,177

BOTSWANA

Table 2.13 GOVERNMENT VEHICLES IN USE BY TYPE OF VEHICLE, 1976-1990 (DRAFT)

	Cars	LDVs (1)	Lorries (2)	Buses (3)	Motor Cycles	Tractors	Trailers	Caravans	Tankers and Horses(4)	Other	Total
1977	-	-	-	-	-	-	-	-	-	-	2,786
1978	-	-	-	-	-	-	-	-	-	-	3,885
1979	-	-	-	-	-	-	-	-	-	-	3,962
1980	110	1,693	1,335	45	60	532	298	117	..	196	4,386
1981	244	1,447	817	70	131	307	270	90	129	331	3,836
1982	244	1,631	795	90	172	367	297	140	137	285	4,158
1983	228	1,737	843	106	169	401	433	141	12	301	4,371
1984	280	1,839	878	110	224	311	604	19	22	388	4,675
1985	387	2,622	1,090	134	220	448	575	28	30	396	5,930
1986	424	2,189	1,100	106	266	301	625	89	12	365	5,477
1987	369	1,653	1,100	117	231	294	509	78	5	438	4,894
1988	461	2,509	1,134	107	273	376	564	183	11	326	5,944
1989	504	2,795	1,170	118	263	893	600	187	23	535	6,388
1990	686	2950	1171	208	165	355	717	(5)	101	178	6,530 *

(1) Light Duty Vehicles up to 1.5 tonnes unladen weight

(2) Lorries more than 1.5 tonnes unladen weight

(3) Buses include combies

(4) Mechanical horses

(5) Unknown

Source: Central Transport Organisation

* Note: All types including construction equipment at 8/5/1992 = 7188

BOTSWANA

FM-MAJOR.RPT	CENTRAL TRANSPORT ORGANISATIONS FLEET MANAGEMENT SYSTEM FLEET REGISTER BY MAJOR TYPE CODES	DATE: 08/05/92 PAGE: 1

TYPE CODE	DESCRIPTION	TOTAL
N01	TRAILER GENERAL	415
N02	TRAILER LOW BED	16
N03	TRAILER SPECIAL	415
P01	LIFT TRUCK	48
P02	GRADER ROAD, MOTORISED	86
P03	ROLLER ROAD SELF PROPELLED	33
P04	SCRAPER ELEVATING	8
P05	TRACTOR DOZER	44
P06	TRACTOR LOADER	48
P07	TRACTOR AGRIC 4X2	243
P08	TRACTOR 4X4	44
V01	MOTOR CYCLE	162
V02	SALOON CAR	486
V03	STATION WAGON 4X2	7
V04	STATION WAGON 4X4	314
V05	AMBULANCE	56
V06	MINI BUS	166
V07	BUS 25 PASSENGER	52
V08	BUS 50 PASSENGER	25
V09	TRUCK PICKUP 4X2	579
V10	TRUCK PICKUP 4X4	2599
V12	TRUCK 6 TONNE 4X2	918
V13	TRUCK 10 TONNE	137
V14	TRUCK 5 TONNE 4X4	21
V15	TRUCK TIPPER 7 TONNE	101
V16	TRUCK TIPPER 10 TONNE	28
V17	TRUCK TANKER WATER	43
V18	TRUCK TANKER FUEL	7
V19	TRUCK TANKER SEWAGE	6
V20	TRUCK MECHANICAL HORSE	3
V21	AIR FIELD FIRE TENDER	11
V22	TRUCK ELECTRICIAN PLATFORM	2
V23	TRUCK MOBILE WORKSHOP	1
V25	TRUCK RECOVERY	59
V26	TRUCK DRILL RIG	5

TOTAL NUMBER OF VEHICLES 7188

BOTSWANA

Table 2.14 PRIVATE AND GOVERNMENT VEHICLES IN USE BY TYPE OF VEHICLE, 1976-1990 (DRAFT)

	Cars	LDVs	Lorries	Buses	Motor Cycles	Tractors	Trailers	Caravans	Tankers & Horses (2)	Other	Total (1)	Number of Vehicles per '000 population
1977	3,319	7,225	3,489	239	595	1,490	1,368	73	..	99	20,663	26.5
1978	4,980	6,664	3,953	357	521	1,637	1,431	71	..	128	23,627	29.0
1979	5,632	6,839	4,717	483	569	1,668	1,668	53	122	96	25,809	30.2
1980	7,944	9,281	7,425	752	885	2,514	2,097	189	213	384	31,684	35.5
1981	9,168	10,465	6,988	969	1,150	2,431	2,351	183	464	529	34,698	37.1
1982	10,312	11,823	7,319	1,102	1,345	2,578	2,591	270	514	597	38,451	39.7
1983	11,267	13,636	7,675	1,220	1,477	2,877	3,051	275	417	584	42,479	42.2
1984	13,040	15,403	8,082	1,342	1,736	2,858	3,400	163	408	700	47,192	45.3
1985	14,670	17,246	8,404	1,341	1,774	3,158	3,676	176	515	718	51,678	47.8
1986	17,024	18,257	8,612	1,412	1,742	3,208	3,855	261	585	648	55,604	49.6
1987	17,500	19,183	8,688	1,514	1,744	3,334	3,939	361	675	767	57,705	49.6
1988	18,228	22,532	9,698	1,726	1,811	3,871	4,426	389	833	787	64,301	53.4
1989	19,499	25,990	9,857	1,668	1,504	4,406	4,567	513	916	1,110	70,030	56.2
1990	22,664	32,679	9,848	2,232	1,593	4,179	5,284	381	930	1,344	80,953	61.1

Notes (1) For 1976-1979 the analysis by type of vehicles related only to private vehicles while the total for the year included Government vehicles.

(2) Mechanical horses

ZAMBIA

MOTOR VEHICLE REGISTRATIONS

TYPE OF VEHICLE	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	TOTAL
Car	[1] 12248	1048	2404	2268	3886	1969	1938	2989	2920	1679	33349
Pick up	[1] 10912	950	1965	1353	2137	1076	1365	1676	1630	1419	24483
Heavy trucks	[1] 963	322	521	401	624	443	318	426	815	502	5335
Light trucks	0	0	0	0	0	0	0	[4] 271	150	102	523
Buses	420	80	198	349	227	186	266	234	177	201	2338
Mini Buses	0	0	0	0	0	0	0	118	161	119	398
Tractors	[2] 689	82	82	260	146	151	157	113	209	94	2095
Motor cycles	[3] 7095	376	376	384	843	424	199	409	574	258	11556
Trailers	[1] 403	288	288	249	291	283	148	89	169	198	2340
M/Horses	0	0	0	0	0	0	0	0	440	426	866
Other	140	90	14	29	63	11	8	23	32	7	417
TOTAL	32870	3236	6512	5293	8217	4543	4399	6348	7277	5005	83700

Notes:

1. High figures, as 1982 last year (of 3 years) when importation from other countries was almost uncontrolled. Thereafter import duty of 50% imposed and excessive imports ceased.
2. Specific purchases for state farms.
3. High figures as many extra purchases by nationals from Far East.
4. More definite categorisation of trucks and mech. horses.

1991 KENYA VEHICLE SALES STATISTICS

	1991 SALES	MARKET SHARE	1990 SALES	MARKET SHARE	%SALES CHANGE	%SHARE CHANGE
TYPES						
PICK-UPS	2945	31%	4586	34%	-36	-3
PASSENGER CARS	2802	30%	3719	27%	-25	+3
LIGHT TRUCKS	1363	14%	1130	8%	+21	+6
4WD ESTATES	856	9%	1364	10%	-37	-1
MINIBUSES	559	6%	894	7%	-37	-1
HEAVY TRUCKS	561	6%	1417	10%	-60	-4
OTHER BUSES	377	4%	472	3%	-20	+1
TOTAL	9463	100%	13582	100%	-30	
MAKES						
NISSAN-DATSUN	1848	20%	2511	18%	-26	+2
MITSUBISHI	1711	18%	1558	11%	+10	+7
ISUZU	1582	17%	2109	16%	-25	+1
TOYOTA	1273	13%	2596	19%	-51	-6
PEUGEOT	1085	11%	1919	14%	-43	-3
MAZDA	597	6%	814	6%	-27	
SUZUKI	390	4%	339	2%	+15	+2
DAIHATSU	213	2%	223	2%	-4	
NISSAN-UD	185	2%	239	2%	-23	
HONDA	105	1%	112	1%	-6	
LAND-ROVER	100	1%	689	5%	-85	-4
SUBARU	90	1%	106	1%	-15	
FIAT-AUTO	67	1%	125	1%	-46	
LEYLAND-DAF	41		31		+32	
VOLKSWAGEN	33		73	1%	-55	-1
MERCEDES	32		39		-18	
FIAT-IVECO	26		22		+18	
OPEL	24					
VOLVO	17		10		+70	
NIVA	16		10		+60	
HINO	15		49		-69	
MINI-MOKE	5		8		-38	
BEDFORD	5					
TATA	3					
TOTAL	9463	100%	13582	100%	-30	

KMI

SOURCES

	1991 SALES	MARKET SHARE	1990 SALES	MARKET SHARE	%SALES CHANGE	%SHARE CHANGE
JAPAN	8009	85%	10656	78%	-25	+7
FRANCE	1085	11%	1919	14%	-43	-3
GT BRITAIN	151	2%	728	5%	-79	-3
ITALY	93	1%	147	1%	-37	
GERMANY	89	1%	112	1%	-21	
RUSSIA	16		10		+60	
SWEDEN	17		10		+70	
INDIA	3					
TOTAL	9463	100%	13582	100%	-30	

SMALL-MEDIUM SALOONS

	1991 SALES	MARKET SHARE	1990 SALES	MARKET SHARE	%SALES CHANGE	%SHARE CHANGE
NISSAN SUNNY	606	32%	639	30%	-5	+2
MITSUBISHI LANCER	394	21%	185	9%	+113	+12
TOYOTA COROLLA 90	280	15%	418	20%	-33	-5
DAIHATSU CHARADE	192	10%	184	9%	+4	+1
PEUGEOT 205	130	7%	173	8%	-25	-1
MAZDA 323	116	6%	186	9%	-38	-3
HONDA CIVIC	105	6%	112	5%	-6	+1
FIAT UNO	67	4%	128	6%	-48	-2
VW GOLF	7		48	2%	-85	-2
MINI MOKE	5		8		-38	
SUZUKI SKYLARK			36	2%		-2
TOTAL	1902	100%	2117	100%	-10	

SMALL-MEDIUM STATION WAGONS

	1991 SALES	MARKET SHARE	1990 SALES	MARKET SHARE	%SALES CHANGE	%SHARE CHANGE
NISSAN-SUNNY	141	50%	181	47%	-22	+3
MAZDA 323	58	20%	59	15%	-2	+5
MITSUBISHI LANCER	44	16%	10	3%	+340	+13
TOYOTA COROLLA 90	40	14%	133	35%	-70	-21
TOTAL	283	100%	383	100%	-26	

LARGE SALOONS

	1991 SALES	MARKET SHARE	1990 SALES	MARKET SHARE	%SALES CHANGE	%SHARE CHANGE
PEUGEOT 504	200	41%	723	69%	-72	-28
PEUGEOT 405	175	36%	151	14%	+16	+22
TOYOTA SIXTEEN	65	13%	154	15%	-58	-2
VW GOLF	25	5%				+5
OPEL	24	5%				+5
ISUZU UHURU			16	2%		-2
TOTAL	489	100%	1044	100%	-53	

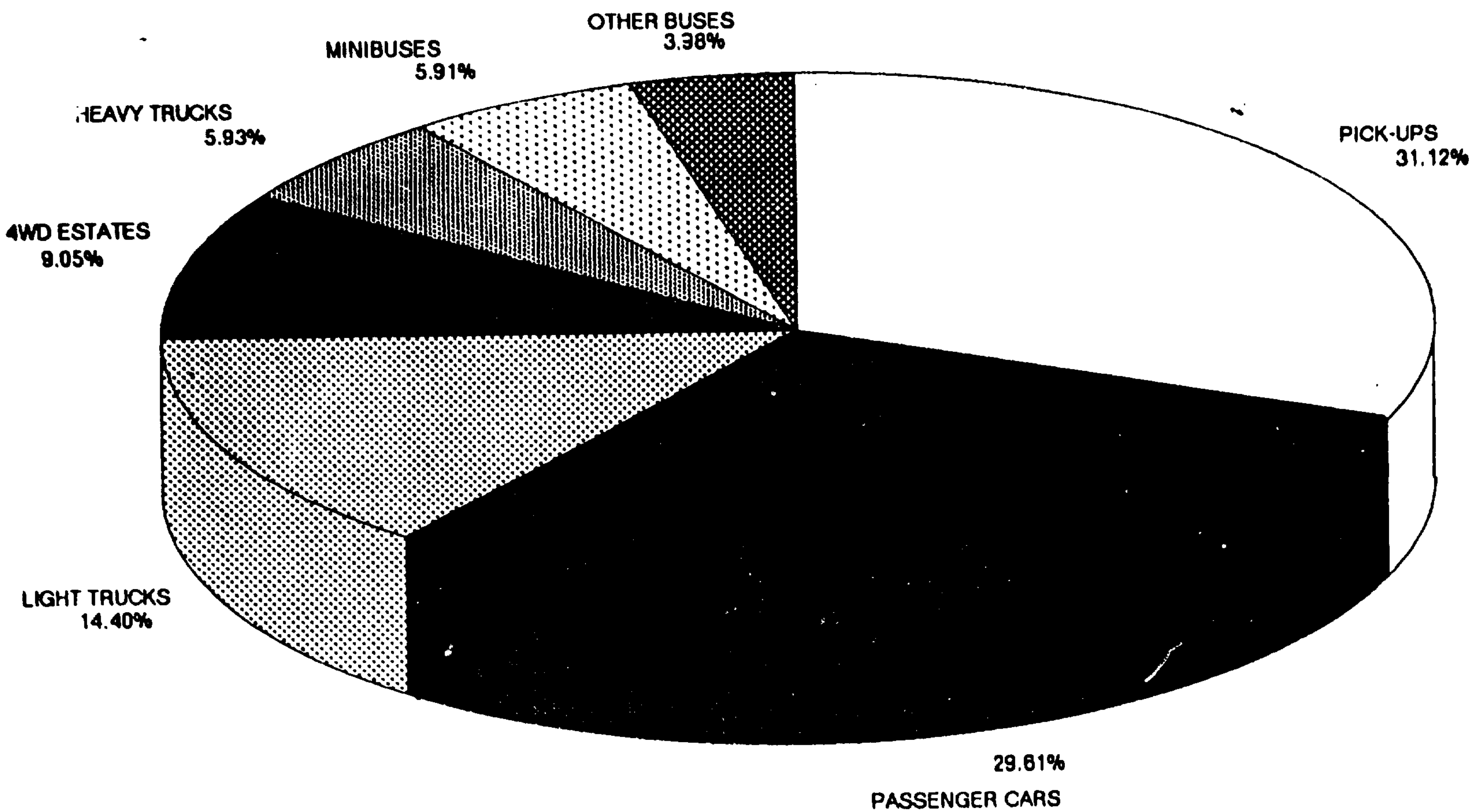
	1991 SALES	MARKET SHARE	1990 SALES	MARKET SHARE	%SALES CHANGE	%SHARE CHANGE
LARGE STATIONS WAGONS						
PEUGEOT 504	90	70%	147	64%	-39	-14
SUBARU 4WD	38	30%	28	16%	+36	+14
TOTAL	128	100%	175	100%	-27	
4WD ESTATES						
SUZUKI SIERRA	390	46%	303	22%	+29	+24
MITSUBISHI PAJERO	207	24%	263	19%	-21	+5
ISUZU TROOPER	135	16%	180	13%	-25	+3
LAND-ROVER	54	6%	450	33%	-88	-27
TOYOTA HILUX DC	22	3%	52	4%	-58	-1
DAIHATSU ROCKY	21	2%	39	3%	-46	-1
LADA NIVA	16	2%	10	1%	+60	+1
TOYOTA LANDCRUISER HT	11	1%	67	5%	-84	-4
TOTAL	856	100%	1364	100%	-37	
HALF-TONNERS						
NISSAN "DEBE"	429	64%	725	73%	-41	-9
MAZDA MULIZA	187	28%	193	19%	-3	+9
SUBARU BRAT	52	8%	78	8%	-33	
TOTAL	668	100%	996	100%	-33	
ONE TONNERS						
TOYOTA HILUX	526	23%	1222	34%	-57	-11
PEUGEOT 504	490	22%	726	20%	-33	+2
ISUZU TFR	418	18%	388	11%	+8	+7
NISSAN SAHARA	266	12%	401	11%	-34	+1
MITSUBISHI L200	255	11%	200	6%	+28	+5
MAZDA B16	167	7%	264	7%	-37	
TOYOTA L-CRUISER	109	5%	150	4%	-27	+1
LAND-ROVER	46	2%	239	7%	-81	-5
TOTAL	2277	100%	3590	100%	-37	
MINIBUSES						
NISSAN URVAN	387	69%	541	61%	-28	+8
TOYOTA HIACE	157	28%	312	35%	-50	-7
MITSUBISHI L300	14	3%	16	2%	-13	+1
VW TRANSPORTER	1		25	3%	-96	-3
TOTAL	559	100%	894	100%	-37	

	1991 SALES	MARKET SHARE	1990 SALES	MARKET SHARE	%SALES CHANGE	%SHARE CHANGE
MEDIUM BUSES						
ISUZU NPR	259	87%	270	90%	-4	-3
MITSUBISHI CANTER	35	12%	22	7%	+59	+5
MAZDA T4100	3	1%	9	3%	-67	-2
TOTAL	297	100%	301	100%	-1	
LARGE BUSES						
NISSAN UD	63	79%	71	45%	-11	+34
LEYLAND-DAF	15	19%	9	6%	+67	+13
MITSUBHISHI FUSO	2	3%	5	3%	-60	
ISUZU MT/MV			73	46%		-46
TOTAL	80	100%	158	100%	-49	
LIGHT TRUCKS						
ISUZU NKR	451	44%	546	48%	-17	-4
MITSUBISHI CANTER	445	43%	401	35%	+11	+8
MAZDA T4100	66	6%	102	9%	-35	-3
TOYOTA DYNA	51	5%	70	6%	-27	-1
NISSAN CABSTAR	19	2%	24	2%	-21	
TOTAL	1032	100%	1143	100%	-10	
SEVEN TONNERS						
ISUZU HTR	210	63%	404	73%	-48	-10
MITSUBISHI FUSO	106	32%	123	22%	-14	+10
TOYOTA	10	3%	18	3%	-44	
BEDFORD	5	2%				+2
HINO			3	1%		-1
LEYLAND-DAF			1			
NISSAN UD			1			
TOTAL	331	100%	550	100%	-40	
TEN TONNERS						
NISSAN UD	78	29%	132	25%	-41	+4
ISUZU FTR	72	27%	165	31%	-56	-4
MITSUBISHI FUSO	69	26%	189	35%	-63	-9
MERCEDES	30	11%	19	4%	+58	+7
HINO	9	3%	26	5%	-65	-2
FIAT-IVECO	7	3%	4	1%	+75	+2
TATA	3	1%				+1
TOYOTA	2	1%				+1
LEYLAND-DAF			1			
TOTAL	270	100%	536	100%	-50	

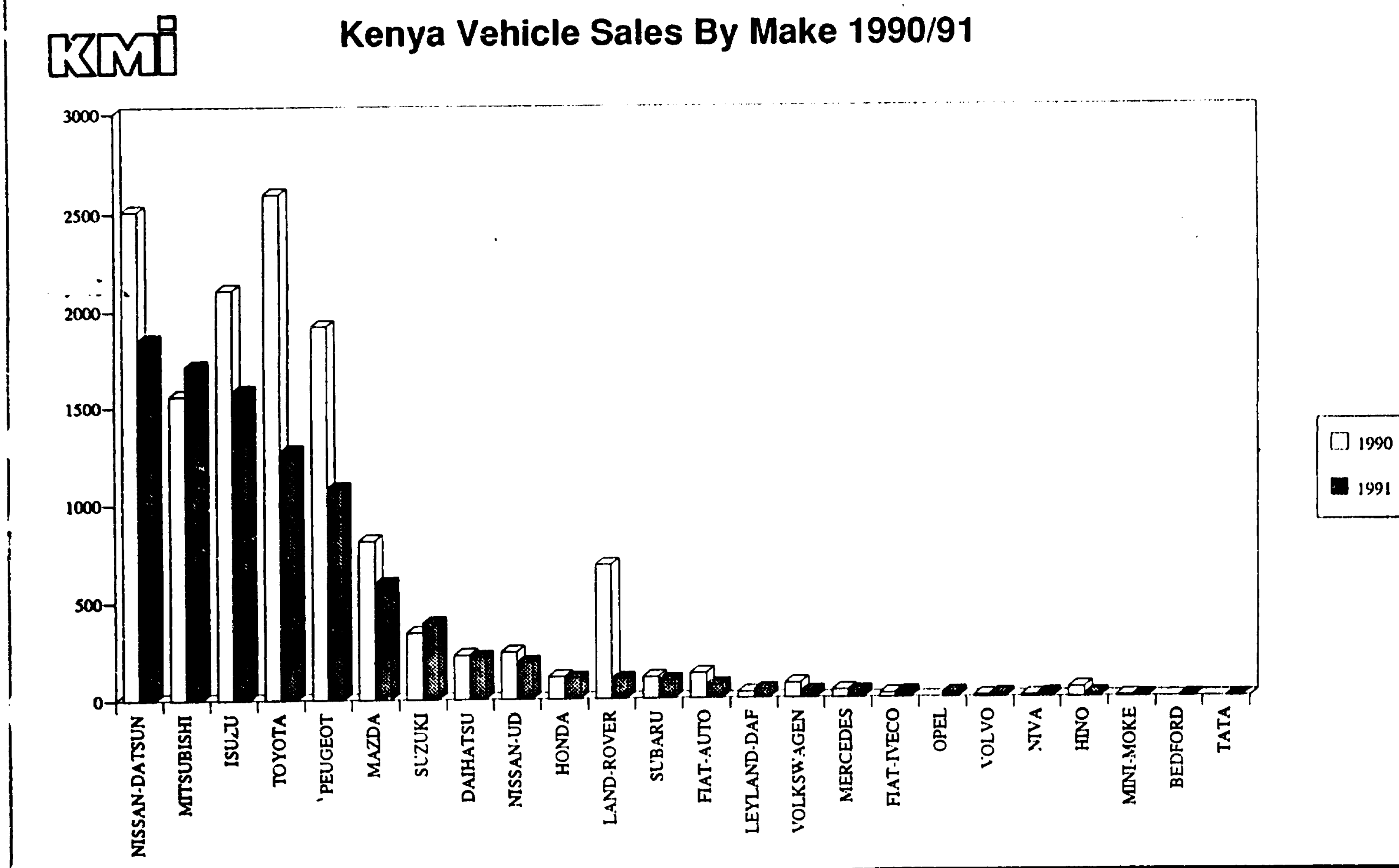
	1991 SALES	MARKET SHARE	1990 SALES	MARKET SHARE	%SALES CHANGE	%SHARE CHANGE
FIFTEEN TONNERS						
MITSUBISHI FUSO	132	52%	136	48%	-3	+4
ISUZU FVM	37	15%	67	24%	-45	-9
NISSAN UD	34	13%	27	10%	+26	+3
LEYLAND-DAF	25	10%	18	6%	+39	+4
FIAT-IVECO	19	8%	14	5%	+36	+3
HINO	5	2%	20	7%	-75	-5
TOTAL	252	100%	282	100%	-11	
OVER 15 + PRIME MOVERS						
VOLVO	17	44%	7	14%	+143	+30
NISSAN UD	10	26%	8	16%	+25	+10
MITSUBISHI FUSO	8	21%	8	16%		+5
MERCEDES BENZ	2	5%	20	41%	-90	-36
HINO	1	3%				+3
LEYLAND-DAF	1	3%	2	4%	-50	-1
FIAT-IVECO			4	8%		-8
TOTAL	39	100%	49	100%	-20	

KMI

Kenya Vehicle Sales By Type 1991



Kenya Vehicle Sales By Make 1990/91



VEHICLES IN USE
AFRICA AND OCEANIA
1989

Source: SMMT

	CARS	PERSONS PER CAR	COMMERCIAL VEHICLES	TOTAL VEHICLES	PERSONS PER VEHICLE
AFRICA					
x Algeria	775,000	30.0	525,000	1,300,000	17.5
x Angola	125,000	70.0	42,000	167,000	52.0
xx Benin	22,000	202.0	12,000	34,000	130.0
x Botswana	14,000	85.0	23,000	37,000	32.0
x Burkina (Upper Volta)	10,000	885.0	13,000	23,000	385.0
xx Burundi	8,000	590.0	10,000	18,000	[illegible]
x Cameroon	90,000	121.0	80,000	170,000	65.0
xx Central African Rep.	13,000	200.0	7,000	20,000	130.0
xx Chad	8,000	625.0	8,000	16,000	315.0
x Congo	26,000	67.0	20,000	46,000	38.0
x Djibuti	10,000	43.0	5,000	15,000	28.0
Egypt	1,030,208	50.5	368,679	1,398,887	37.2
xx Equatorial Guinea	4,000	98.0	4,000	8,000	49.0
x Ethiopia	42,250	1025.0	20,000	62,250	695.0
x Gabon	25,000	46.0	15,000	40,000	29.0
xx Gambia	4,500	155.0	1,000	5,500	125.0
x Ghana	60,000	225.0	45,000	105,000	130.0
x Guinea	20,000	303.0	10,000	30,000	202.0
x Guinea Bissau	3,000	296.0	2,000	5,000	178.0
Ivory Coast	155,000	64.9	90,000	245,000	41.0
x Kenya	135,000	150.0	145,000	280,000	72.5
xx Liberia	7,000	310.0	2,800	9,800	220.0
x Libya	425,000	8.2	325,000	750,000	4.7
Madagascar	27,749	396.4	21,164	48,913	224.9
# Malawi	15,646	510.2	10,260	25,906	308.1
x Mali	18,000	455.0	8,000	26,000	315.0
x Mauritania	8,000	235.0	5,000	13,000	145.0
x Mauritius	32,000	33.0	13,000	45,000	23.0
x Morocco	510,000	53.0	240,000	750,000	35.0
x Mozambique	87,500	160.0	24,000	111,500	125.0
x Niger	17,000	370.0	18,000	35,000	180.0
x Nigeria	785,000	125.0	625,000	1,410,000	70.0
x Reunion	135,000	4.1	45,000	180,000	3.1
x Rwanda	20,000	300.0	15,000	35,000	175.0
x Senegal	87,500	75.0	25,000	112,500	60.0
x Seychelles	4,000	16.3	1,500	5,500	11.8
x Sierra Leone	25,000	148.0	15,000	40,000	93.0
xx Somalia	7,500	775.0	9,000	16,500	350.0
South Africa	3,246,794	10.0	1,336,545	4,583,339	7.1
x Sudan	105,000	205.0	50,000	155,000	140.0
xx Swaziland	35,000	21.0	20,000	55,000	14.0
x Tanzania	45,000	485.0	53,000	98,000	225.0
x Togo	25,000	125.0	12,500	37,500	82.5
x Tunisia	200,000	36.0	175,000	375,000	20.0
x Uganda	13,000	1260.0	13,000	26,000	630.0
x Zaire	95,000	365.0	85,000	180,000	190.0
x Zambia	100,000	67.0	65,000	165,000	41.0
x Zimbabwe	210,000	42.0	75,000	285,000	32.0
TOTAL AFRICA	8,866,647	65.3	4,733,448	13,600,095	42.6
OCEANIA					
Australia	7,442,200	2.2	[illegible]	9,489,500	1.8
x Fiji	33,000	22.0	[illegible]	58,000	12.5
x Fr Polynesia	36,000	4.8	[illegible]	51,000	3.4
x Guam	120,000	1.1	[illegible]	148,000	0.9
x New Caledonia	45,000	3.4	17,000	62,000	2.5
x New Zealand	1,550,000	2.1	315,000	1,865,000	1.8
x Papua New Guinea	30,000	120.0	60,000	90,000	[illegible]
x Vanuatu	3,500	40.0	2,500	6,000	[illegible]
TOTAL OCEANIA	9,259,700	2.7	2,509,800	11,769,500	[illegible]
+ GRAND TOTAL	423,383,591	11.5	132,108,362	555,491,953	[illegible]

x Estimated   xx Estimated (No information received for some years)
Latest officially quoted figure   + Total Countries shown only.

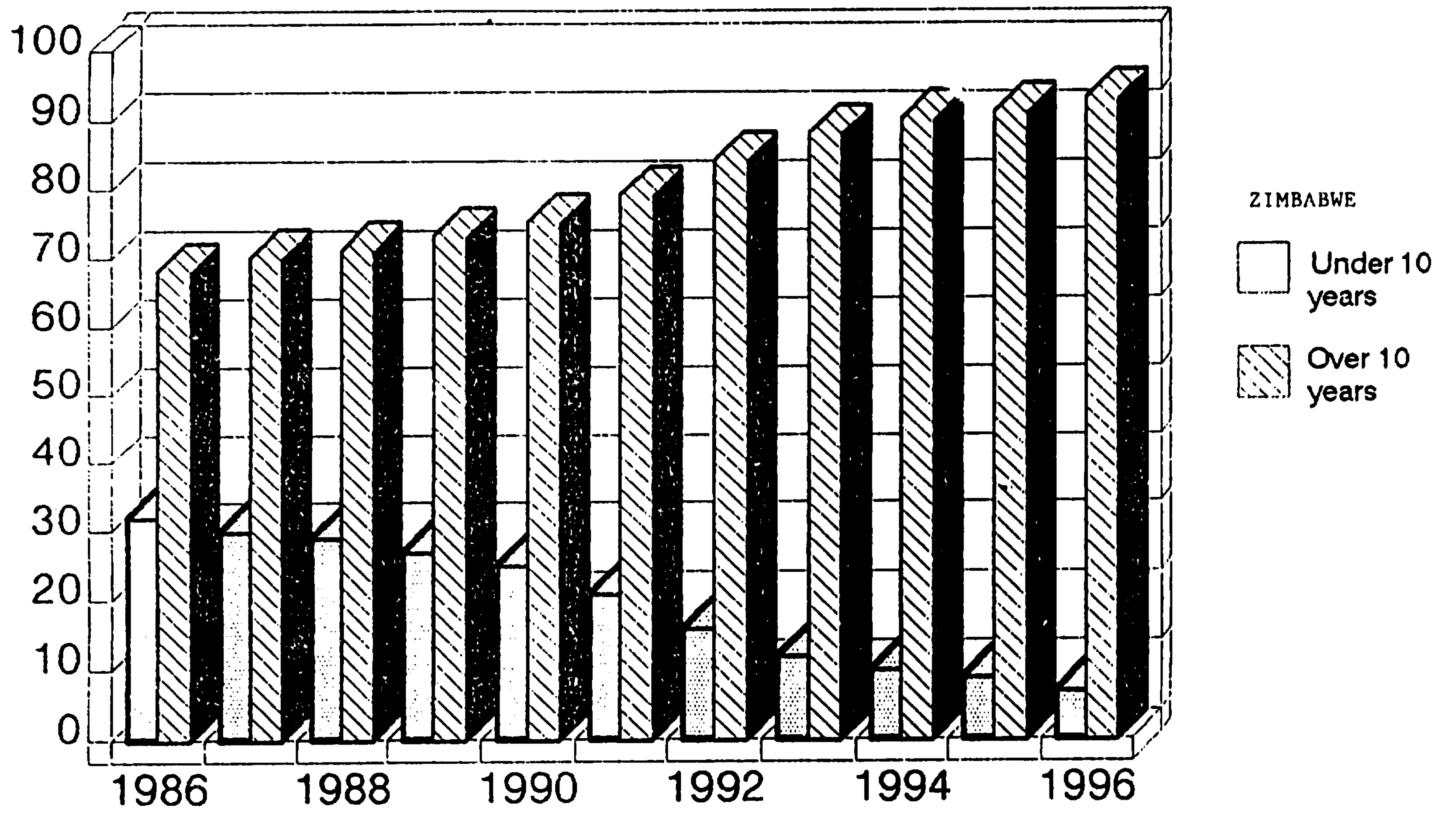
TARIFF NUMBERS		ESSENTIAL SPARE PARTS FOR PASSENGER AND COMMERCIAL VEHICLES
4009 3000	:	Water Hoses, Brake Hoses, Hydraulic Hoses and Elbows
4010 1000	:	V Belts, Cambelts
4016 9300	:	Oil Seals, O Rings, Valve Stem Seals, Rubber Gaskets, Washers
7307 1900	:	Fuel Injector Pipes/Brake Pipes
7312 9000	:	Accelerator, Brake and Speedo cables
7315 1100	:	Timing Chains (Rollers)
7315 1210	:	Timing Chains (Other)
7320 9000	:	Springs, Coils - front and rear
8301 2000	:	Door and Ignition Locks
8409 9100	:	International combustion engine parts (spark ignition)
8409 9990	:	International combustion engine parts (diesel)
8413 3000	:	Pumps - fuel, lubricating and cooling for international combustion engines.
8413 9190	:	Parts for fuel, lubricating and cooling pumps
8414 5990	:	Motor Vehicle Fan
8414 9090	:	Motor Vehicle Fan Parts
8421 2300	:	Oil/Fuel filters for international combustion engines (which are not manufactured in Zimbabwe)
8421 3100	:	Intake air filters for international combustion engines (which are not manufactured in Zimbabwe)
8482 1000	:	Ball Bearings
8482 2000	:	Tapered roller bearings
8482 4000	:	Needle roller bearings
8482 8000	:	Other including combined ball/roller bearings
8482 9100	:	Loose needles, Ball and rollers
8483 1010	:	Camshaft, cranshaft, plain bearing shells for internal combustion engines and transmission shafts etc.

8483 2010	:	Bearings housings (transmission/gearbox etc.) incorporating ball or roller bearings (parts of internal combustion pistion engines other than aircraft engines).
8483 3010	:	Bearings housings (transimission/gearbox etc.) not incorporating ball or roller bearings; Plain shaft bearings. (Parts of internal combustion engines, other than aircraft engines).
8483 4010	:	Transmission gears etc.
8483 5010	:	Flywheel, pulleys etc.
8483 6010	:	Driveshafts, prop shafts universal joints etc.
8384 9010	:	Starter drives
8484 9000	:	Gasket sets / Cylinder head gaskets (which are not manufactured in Zimbabwe)
8504 4000	:	Rectifiers - Static Converters
8504 5090	:	Rectifiers - Others
8511 1000	:	Spark Plugs (which are not manufactured in Zimbabwe)
8511 2000	:	Magneto
8511 3000	:	Distributors and ignition coils
8511 4000	:	Starter motors
8511 5000	:	Alternators / Generators
8511 8000	:	Voltage Regulators with Cutouts
8511 9000	:	Parts for distributors, starters, alternators, magnetos and generators
8512 3000	:	Hooters
8512 4000	:	Windscreen wiper motors
8512 9000	:	Wiper Parts
8532 2900	:	Condensers
8534 0010	:	Printed Circuits Boards
8534 0090	:	Printed Circuits (Other)
8536 1000	:	Fuses
8536 4100	:	Relay's and regulators
8536 5000	:	Switches and Solenoids
8539 1010	:	Seal Beam unit s / globe

3541 1000	: Diodes
8545 2000	: Carbon Brushes
8708 4090	: Motor vehicle gear boxes
8708 5000	: Drive axles
8708 7090	: Road wheels
8708 8000	: Shock absorbers (which are not manufactured in Zimbabwe
8708 9120	: Radiator Cap
8708 9390	: Clutch plates, pressure plates and related parts
8708 9490	: Steering Boxes
8708 9990	: Chassis parts, i.e. tie rod ends, drag links etc.
8708 3100	· Disc Brake Pads
8708 3190	: Brake shoes
8708 3990	: Brakes and Servo Parts
9032 1000	: Thermostats

ZIMBABWE

PROJECTED FLEET AGE PROFILE



SOURCE: AGRI MOTOR REVIEW 1989
COOPERS & LYBRAND ASSOCIATES

NATIONAL ASSOCIATION OF AUTOMOTIVE COMPONENT AND ALLIED MANUFACTURERS

COMPOSITE MEMBERSHIP REGISTER

13 NOVEMBER 1991

Information contained in Register is as furnished by members.

SYMBOL	CLASSIFICATION
A	Manufacturers and suppliers of O.E. components to vehicle assembly plants only.
B	Manufacturers and suppliers of O.E. as well as P & A components to vehicles.
C	Manufacturers and suppliers of components to the distributive sector.
D	Manufacturers of allied products supplied to vehicle assembly plants and other sectors of industry e.g. paint, glass, abrasives, fasteners, upholstery, etc.

* DENOTES FOUNDER MEMBERS

	COMPONENT MANUFACTURERS	COMPONENT MANUFACTURERS	COMPONENT MANUFACTURERS
BCD	**ACS CORPORATION** ACS Mnfrg. (Pty) Ltd ACS Tooling Systems (Pty) Ltd Lower Baird St, Uitenhage PO Box 518, Uitenhage 6230	A.C. Stevenson, Chairman P. Thomas, Man. Dir. ACS Mnf. Tel: (0422) 9227030 Fax: (0422) 9924148	Auto pressings and assemblies (600 t), auto assembly lines, auto welding, robotics, mechanical handling equipment, body in white tooling. EXPORTER: YES No. of employees: 200
BC	**AE BEARINGS** (Div. Asseng Automotive Ltd) 15 Alexander Rd, Westmead, Pinetown PO Box 198, Pinetown 3600	M. Hickman, Exec. Dir. Tel: (031) 7003511 Fax: (031)7004811 Tlx: 625118	Automotive plain shaft bearings. EXPORTER: YES No. of employees: 432
C	**AE ENGINE PARTS** (Div of Asseng Automotive Ltd) 33 Western Blvrd., City West PO Box 636, Crown Mines 2025	J.R. Koen, Exec. Dir. R.R.G. Thorp, Fin. Dir. Tel: (011) 8321180 Fax: (011) 8369120 Tlx: 488453	Suppliers of engine components for reciprocating applications. EXPORTER: YES No. of employees: 79
AB	**AE PISTONS & AE LINERS** (Div. of Asseng Automotive Ltd) 138 Main Reef Rd, Roodepoort PO Box 131, Roodepoort 1725	E. Shimbles, Exec. Dir. Tel: (011) 7662100 Fax: (011) 7663696 Tlx: 425868	Pistons, liners and gudgeon pins. EXPORTER: YES No. of employees: 380
BC*	**ALFRED TEVES TECHNOLOGIES (SA) (Pty) Ltd** Kent Rd, Boksburg North PO Box 471, Boksburg 1460	J.H. Brandtner, Man. Dir. G.J. Levy, Mark. Dir. Tel: (011) 914-2700 Fax: (011) 914-1151 Tlx: 429571	Disc/calipers, drum brakes, brake hoses, master cylinder/booster and replacement parts for these assemblies. EXPORTER: NO No. of employees: 390
BC	**ANROPA** (Sub Division of Swift Wiper Factory cc) 147 Heidelberg Rd, City and Suburban PO Box 260614, Excom 2023	P. van Deijzen, Gen. Man. Tel: (011) 337-8507 Fax: (011) 3345839	Control cable, brake, speedometer, tachometer, clutch, accelerator, bonnet cables, industrial control cables. EXPORTER: NO No. of employees: 110
BC	**ARMSTRONG HYDRAULICS SA (Pty) Ltd** 267–275 Grahamstown Road, Deal Party PO Box 8943, Estadeal 6012	L. Soanes, Man. Dir. Tel: (041) 431561 Fax: (041) 436904	MacPherson strut cartridges, telescopic shock absorbers, suspension struts, control arms. EXPORTER: YES No. of employees: 525
BC*	**ASSENG AUTOMOTIVE Ltd** 33 Western Blvrd, City West Private Bag 5, Crown Mines 2025	J.A. Meyer, Man. Dir. B.A. Land, Dir. O.E. Sales Tel: (011) 8321180 Fax: (011) 8344069 Tlx: 482086	Pistons, liners, gudgeon pins, bearings and valves. EXPORTER: YES No. of employees: 967
CD	**A.S. TRANSMISSIONS & STEERINGS (Pty) Ltd** Reservoir Road, Boksburg PO Box 955, Boksburg 1460	L. Lee, Man. Director J.R. Couldridge, Exec. Mark. Dir. Tel: (011) 9152101 Fax: (011) 9151857 Tlx: 746639	Manual gearboxes, drive axles, power steering pumps. EXPORTER: YES No. of employees: 379

B*	**ATLANTIS DIESEL ENGINES (Pty) Ltd** William Gourlay St, Atlantis PO Box 1222, Cape Town 8000	F. Korte, Man. Dir. P.J. Greyling, Dir. Comm. S. de Vos, Exp. Man. Tel: (0226) 38911 Fax: (0226) 38600 Tlx: 558241 ADESA Tlx: 558240	Cylinder blocks, bearing caps, cylinder heads, crankshafts, connecting rods and camshafts, cylinder liners, flywheels, flywheel housing, sumps and covers. EXPORTER: YES No. of employees: 1850
B*	**AUGUST LAEPPLE (Pty) Ltd** 8 Martinus Ras St, Rosslyn PO Box 911-168, Rosslyn 0200	H. Taifel, Man. Dir. D. Toth, Contracts Man. Tel: (012) 582110 Fax: (012) 583878 Tlx: 322960 SA	Body panels, chassis, crossmembers, fuel tanks. EXPORTER: YES (VIA O.E.) No. of employees: 1472
B	**AUTO CABLE MANUFACTURING** (A division of Femco Technology Holdings Ltd) Hendrik Verwoerd Drive, Brits PO Box 2218, Brits 0250	R.K. Schusser, Executive Dir. M.J. Bisschoff, Sales Man. Tel: (01211) 502910 Fax: (01211) 502663 Tlx: 320334 SA	Wiring harnesses, battery cables, automotive cable, battery booster kits, clips, earth straps, braided wire, battery terminals. EXPORTER: YES No. of employees: 575
A	**AUTOCAST** 15 Piet Pretorius St Industrial Township, Brits PO Box 1031, Brits 0250	E.G. Harris, Dir. C. van Wyk, Comm. Man. Tel: (01211) 50292 Fax: (01211) 503057 Tlx: 322601	Cylinder blocks, cylinder heads, bearing caps, manifolds, flywheels, brake discs, brake calipers, pulleys, brackets etc. non-automotive castings. EXPORTER: YES No. of employees: 492
C	**AUTOCOM (Pty) Ltd** 27 Sprinz Ave, Village Main PO Box 26009, Excom 2023	B.E. Hobbs, Man. Dir. S.B. Hobbs, Supply Man. Tel: (011) 331-3731/3 Fax: (011) 331-2182/6589	Steering and suspension parts, chevrons, metal pressings, J bolts-battery hold downs, exhaust hangers, cable lugs, spark plug spanners. EXPORTER: YES No. of employees: 48
B*	**AUTO INDUSTRIAL (Pty) Ltd** 107 Fitter Rd, Spartan PO Box 748, Kempton Park 1620	D.C. Fragale, Man. Dir. T. D'Arcy, Sales/Admin. Dir. Tel: (011) 3941616 Fax: (011) 3941441	Axles, drive shafts, con rods, universal joints, universal joint parts, machining of brake discs, brake drums, wheel hubs, flywheels, crankshafts, pulleys, manifold exhaust, prop shafts, spindles, steering knuckles, caliper brackets, spline shafts. EXPORTER: YES No. of employees: 1000
ABC	**AUTOMOTIVE ELECTRONIC TECHNOLOGIES (Pty) Ltd** Cnr Brakpan & Van Dyk Rds Boksburg PO Box 468, Boksburg 1460	S. Shaul, Gen. Man. Tel: (011) 8996291 Fax: (011) 89964	Electronic devices for motor vehicle controls. EXPORTER: YES No. of employees: 59
B	**AUTOPLASTIC (Pty) Ltd (AECI Group)** Charlotte St, North End, Port Elizabeth PO Box 770, Port Elizabeth 6000	I.A. Krige, Man. Dir. Tel: (041) 543311 Fax: (041) 541177 Tlx: 242020	Moulded door panels, moulded carpets, sunvisors, rotationally cast armrests, integral skin stone guards, vacuum forced components, R.F. welded door casings, vacuum formed instrument panels, moulded headliners, sewn seat inserts and covers, sewn interior carpets, parcel trays. EXPORTER: NO No. of emloyees: 280
B	**AUTOPLASTIC (Pty) Ltd (AECI Group)** Kynoch Rd, Umbogintwini PO Box 61, Umbogintwini 4120	I.A. Krige, Man. Dir. N. Caramanus, Branch Man. Tel: (031) 941304 Fax: (031) 942520 Tlx: 650353	Moulded carpets, moulded headliners, vacuum formed components, sunvisors, moulded and flat door panels, moulded parcel trays, PVC profile extrusions. EXPORTER: NO No. of employees: 114
AB	**AUTO-TUBE (Pty) Ltd** 1 Bridge Rd, Stikland, Bellville PO Box 416, Eppindust 7475	J. Lombaard, Man. Dir. Tel: (021) 943837 Fax: (021) 544209	Automotive tube components with the main line manufacture being injector pipes, dipstick tubes, dipsticks, fuel lines, water lines etc. with appropriate connectors in steel or aluminium. EXPORTER: NO No. of employees: 40
	BALDWINS STEEL – see Dorbyl		
B	**BOART EXPLORATION SERVICES – Mnfrg.** 416 Heidelberg Road, Tulisa Park PO Box 83586, South Hills 2136	R.B. Bovim, Man. Dir. D. Brookes, Prop. Eng. Tel: (011) 9072417 Fax: (011) 9071092 Tlx: 748151	Components for light to medium commercial and military 2 tons to 10 tons and heavy duty hydraulic cylinders for medium tipper vehicles. EXPORTER: YES No. of employees: 2417
ABC	**BOSAL AFRIKA (Pty) Ltd** Plant 35: Towbars & Exhaust Systems 40 Van Eck St, Chamdor, Krugersdorp 1739 PO Box 4244, Luipaardsvlei 1740	J. Kellerman, Plant Man. Tel: (011) 7622449 Fax: (011) 7627164 Tlx: 422189	Towbars, grille guards, roll bars, exhaust systems and Brospeed high-performance exhaust systems. EXPORTER: YES No. of employees: 233 (* Includes Plant 49)
ABC	**BOSAL AFRIKA (Pty) Ltd** Plant 49: Brospeed 375 Sterling St, Strydom Park PO Box 56394, Pinegowrie 2123	A. Brough, Plant Dir. Tel: (011) 7937441/2 Fax. (011) 7937427	High performance exhaust systems and conversions. EXPORTER: YES No. of Employees: *

ABC*	**BOSAL AFRIKA (Pty) Ltd (Central Office)** Cnr Rooibok Ave & Koedoe St, Koedoespoort Industrial Sites, Pretoria PO Box 1719, Pretoria 0001	J. Burger, Man. Dir. Tel: (012) 731171 Fax: (012) 730086 Tlx: 321342 Tlx: 350011 = BOSAL	Head office of group. Exhaust systems, jacks and equipment, towbars, tube and tube products. EXPORTER: YES No. of employees: 27
ABC	**BOSAL AFRIKA (Pty) Ltd** Plant 1: Exhaust Cnr Rooibok Ave & Koedoe St Koedoespoort Industrial Sites, Pretoria PO Box 1652, Pretoria 0001	S Stevens, Supply Dir. Tel: (012) 731171 Fax: (012) 737872 Tlx: 321342 Tlx: 350011 = BOSAL	Exhaust systems for passenger and LCV vehicles as well as trucks, buses and industrial applications. EXPORTER: YES No. of employees: 599
ABCD	**BOSAL AFRIKA (Pty) Ltd** Plant 2 Charles Goodyear St, Uitenhage PO Box 52 Uitenhage 6230	R. Prinsloo, Exec. Dir. Tel: (0422) 9229014 Fax: (0422) 9921822 Tlx: 245400 = BOSAL	Exhaust systems, precision steel tubing and tube products, catalytic converters. EXPORTER: YES No. of employees: 255
ABC	**BOSAL AFRIKA (Pty) Ltd** Plant 3: J.E.T. (Jacks, Equipment & Tools) Koedoe St., Koedoespoort Industrial Sites PO Box 6621, Pretoria 0001	D. Renecle, Exec. Dir. Tel: (012) 736138 Fax: (012) 736147 Tlx: 350050 = BOSJET	Hydraulic and mechanical jacks, workshop equipment and tools. EXPORTER: YES No. of employees: 231
ABCD	**BOSAL AFRIKA (Pty) Ltd** Plant 9: Tube 293 Zasm St, Waltloo, Pretoria PO Box 2715, Pretoria 0001	A. Wakeford, Mark. Dir. Tel: (012) 835211 Fax: (012) 835793 Tlx: 350027 = BOSAL	Precision steel tubing, tube products, LDV cab protectors. EXPORTER: YES No. of employees: 252
B	**BREMCO (Pty) Ltd** Charles Mathew St, Atlantis PO Box 1600, Dassenberg 7350	A.B. Jackson, Man. Dir. J.H. van Bergen, Qual. Man. Tel: (0226) 740101 Fax: (0226) 73386	Steering wheels. EXPORTER: YES No. of employees: 88
	BUNDY TUBING – see Dorbyl		
	CAR-PART INDUSTRIES – see Dorbyl		
D	**CHEMSERVE METAL SCIENCES (Pty) Ltd** (AECI Group) 200 Bergrivier Drive, Chloorkop PO Box 12055, Chloorkop 1624	N.A. Root, Man. Dir. Tel: (011) 9762162 Fax: (011) 9762320 Tlx: 746142 SA	All chemicals, sealants and some adhesives used in the manufacture of vehicles in the motor plants as well as to component manufacturers. EXPORTER: YES No. of employees: 47
BC	**COMPART (Pty) Ltd** 21A Vanadium St, Border Industrial Sites, Rustenburg PO Box 2067, Rustenburg 0300	B.E. Altern, Man. Dir. Tel: (0142) 960225 Fax: (0142) 960169	Water and oil pumps for vehicles. Water pump repair kits. EXPORTER: YES No. of employees: 42
BC	**CONNOISSEUR AUTOMOTIVE AIR CONDITIONING** Main Rd. Markman Township, Aloes Industrial Park, Port Elizabeth PO Box 23206 Diasland 6009	K.I. Reilly, Man. Dir. Tel: (041) 611710 Fax: (041) 611377	Climatic control components (air conditioning and heaters), precision aluminium and steel tube assemblies, plastic assemblies (vacuum and injection moulded), after market airconditioner kits for all makes of vehicles. EXPORTER: YES No. of employees 125
B	**CONTROL INSTRUMENTS VDO (Pty) Ltd** 46 Juta St, Braamfontein PO Box 31037, Braamfontein 2017	T.E. Buzer, Man. Dir. P. Ellis, Tech. Dir. T. Savage, Mark. Dir. Tel: (011) 4036000 Fax: (011) 4031704	Access control systems, barrier systems, tank sender units, traffic detector systems, cables, rev limiters, automotive electronics. Industrial instrumentation, fleet management systems, vehicle security systems. EXPORTER: YES No. of employees: 320
B	**CONTROL LOGIC (Pty) Ltd** 270 Brickfield Rd, Durban PO Box 2332, Durban 4000	P. Lambert, Dir. G. Morgan, OE Sales Man. Tel: (031) 295222 Fax: (031) 292773 Tlx: 650131 SA	Automotive electronic components, cruise controls, vehicle security systems, wiring harnesses, engine and management systems, central locking motors. EXPORTER: YES No. of employees: 730
A	**COURTHIEL VELOURS (Pty) Ltd** T/A Court Fabrics Voemaar St, Daljosafat, Paarl PO Box 319, Paarl 7620	F.W. Lombard, Man. Dir. M. Monk, Sales & Mark. Man. Tel: (02211) 626000 Fax: (02211) 626496 Tlx: 520478	Acrylic and polyester pile velour upholstery fabric. EXPORTER: NO No. of employees: 171
C	**DANCOR EXPORTS** 401 Salmon Grove Chambers 407 Smith St, Durban 4001	D.R. van den Heever, Chairman N.A. Bird, Dir. Tel: (031) 3014021 Fax: (031) 3051154	Disc pads, brake shoes, clutch cover assemblies, lever covers, diaphragm covers, clutch kits, shock absorbers. EXPORTER: YES No. of employees: 4
C	**DONALDSON FILTRATION SYSTEMS (Pty) Ltd** Frank Donaldson House Kinghall Ave Epping Industria Ext 3 PO Box 149, Eppindust 7475	M.A. Forbes, Man. Dir. P. Hansen, OE Sales Man. Tel: (021) 546211 Fax: (021) 547708 Tlx: 520647 SA	Air fuel and oil filtration equipment. EXPORTER: YES No. of employees: 220

	DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd Dorbyl Park, 4 Skeen Blvrd, Bedfordview PO Box 1451, Bedfordview 2008	M.J. Smithyman, Chairman Tel: (011) 6079111 Fax: (011) 6072343 Tlx: 422500/424190	Head Office of Group.
B	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Auto Components Div. P.E. Works 20 Henry Ford Rd, Neave Township PO Box 4297, Korsten 6014	D. Kleynhans, Exec. Dir. H.A. Pearce, Div. Gen. Man. Tel: (041) 431414 Fax: (041) 431420 Tlx: 245603	Seat frames, seat slides, height adjusters, recliner mechanisms, window regulators, jack systems EXPORTER: YES
B	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Guestro Wheels 6 Marconi St, Heidelberg PO Box 335, Heidelberg 2400	D.J. Kleynhans, Man. Dir. R. George, Gen. Man. Tel: (0151) 5171 Fax: (0151) 2185 Tlx: 747744	Roadwheels for heavy commercial vehicles, earthmovers and trailers, agricultural wheels for fitment with pneumatic tyres and solid tyres. EXPORTER: YES
A	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** 20 Henry Ford Rd, Neave Township PO Box 4297, Korsten 6014	R.J. Mott, Group Mark. Dir. Tel: (041) 431414 Fax: (041) 413505	Automotive components. EXPORTER: YES
BC	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Guestro Wheels Division – P.E. Works New Brighton Township Ext No. 1 Struandale Ind. Township PO Box 1016, Port Elizabeth 6000	D.J. Kleynhans, Man. Dir. J.J. Powell, Gen. Man. Tel: (041) 422110 Fax: (041) 422118 Tlx: 242104	Roadwheels for passenger cars, light and heavy commercial vehicles and agricultural trailers and implements for fitment with pneumatic tyres. EXPORTER: YES
[illegible]	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Guestro Alloy Wheels 69 Serenade Rd, Elandsfontein PO Box 951, Isando 1600	D.J. Kleynhans, Man. Dir. T. Clarkson, Gen. Man. Tel: (011) 6280610 Fax: (011) 8280696 Tlx: 742505	Cast and machined aluminium roadwheels for passenger cars, light commercial vehicle and trailer industries, for fitment with pneumatic tyres. EXPORTER: YES
AB	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Guestro Wheels Division Gaigher St, Rosslyn PO Box 911-007, Rosslyn 0200	D.J. Kleynhans, Man. Dir. C.T. Everton, Gen. Man. Tel: (012) 582781 Fax: (012) 581242 Tlx: 322758	Steel road wheels for passenger and light commercial vehicles, trailers and caravans. EXPORTER: YES
A	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Swasap Works (Div. of Salchain Works) Rinkhals St, Industries East, Germiston PO Box 366, Germiston 1400	A.F.P. Lynch, Man. Dir. D. Anderson, Gen. Man. C. Thatcher, Mark. Man. Tel: (011) 8253110 Fax: (011) 8731825	Railway axles and assembly of railway wheel pairs, forged bars and shafts, general and automotive machining facilities, conveyor and elevator chains. EXPORTER: YES
AB	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Auto Components Div., Lansdowne Works 27 Flamingo Crescent, Lansdowne PO Box 24121 Lansdowne 7780	D. Kleynhans, Man. Dir. H. Pearce, Div. Gen. Man. B. Barkley, Gen. Man. Tel: (021) 7976113 Fax: (021) 7971636 Tlx: 5226373	Profile door hinges and truck door hinges. EXPORTER: YES
D	**DORBYL AUTOMOTIVE COMPONENTS (Pty) Ltd** Baldwins Steel Cnr Tile & All Black Rds Boksburg North PO Box 6305, Dunswart 1508	C.A. Embleton, Man. Dir. I.M. Maclean, Exec. Dir. D. Lawrence, Mark. Analyst N. van Niekerk, Nat. Mark Dir. Tel: (011) 9174503 Fax: (011) 9174714	Steel processing (sheet cut to length, blanked and coil slit). EXPORTER: YES
ABC	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Bundy Tubing 13 Buffalo Rd Extension, King William's Town PO Box 506, King William's Town 5600	D. Kleynhans, Man. Dir. L. Saayman, Gen. Man. R. Lowin, Mark. Man. Tel: (0433) 23442 Fax: (0433) 33914	Bundyweld tubing, automotive brake and fuel lines, miscellaneous automotive small dia. tubular components, backwall condensors. EXPORTER: YES
ABC	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Car-Part Industries (Pty) Ltd c/o 4th & 5th Sts, Babelegi Republic of Bophuthatswana PO Box 990, Hammanskraal 0400	A.F.P. Lynch, Man. Dir. G. van Rensburg, Gen. Man. P. van Staden, Mark. Man. Tel: (01464) 78592/78279 Fax: (01464) 75288	Suspension and steering ball joints for the automotive industry. EXPORTER: YES
ABC	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Forging and Machining Div., Uitenhage Edison St, Uitenhage PO Box 457, Uitenhage 6230	A.F.P. Lynch, Man. Dir. M.V.G. Ruscheniko, Mark. Dir. Tel: (0422) 9229702 Fax: (0422) 9229774 Tlx: 245414	Propeller shafts for passenger and commercial vehicles and buses, rack and pinion steering gear, front wheel drive axles, agricultural power take-off shafts. Automotive and general forgings. EXPORTER: YES

B	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Autoplate Works 13 Diesel Rd, Isando PO Box 122, Isando 1600	D. Kleynhans, Man. Dir. N. Gibson, Works Man. Tel: (011) 9742429 Fax: (011) 3922556	Electroplating service only. EXPORTER: YES
A	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Elandsfontein Works Barbara Rd, Elandsfontein PO Box 8061, Elandsfontein 1406	D. Kleynhans, Man. Dir. M. Morgan, Div. Gen. Man. Tel: (011) 8280620 Fax: (011) 8280249 Tlx: 745539 SA	Seat frame assemblios, chassis assemblies, metal bumper pressings, wheel trims (trim rings) and various metal pressing components, grader blades. EXPORTER: YES
A	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Koolmaster 312 Marks Street, Waltloo PO Box 912 – 1056, Silverton 0127	D.J. Kleynhans, Man. Dir. M. Morgan, Div. Gen. Man. G. Harding, Gen. Man. Tel: (012) 831194 Fax: (012) 835529	Refrigeration and airconditioning heat exchangers, condensing units, components and fuel tanks. EXPORTER: YES
ABC	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Salcast (Pty) Ltd Lincoln Rd, Industrial Sites, Benoni South PO Box 5016, Benoni South 1502	A.F.P. Lynch, Man. Dir. E.K. Diack, Exec. Dir. Tel: (011) 8451546 Fax: (011) 541154 Tlx: 750151	S.G. and grey iron castings for automotive industry as well as for general engineering. EXPORTER: YES
	DORBYL LIMITED Salmac Stainless Tube 21 Chenik Street, Chamdor PO Box 694, Krugersdorp 1740	P. Waetzel, Man. Dir. A. Isaakidis, Gen. Man. Tel: (011) 7622531 Fax: (011) 7626262 Tlx: 420351	Manufacturer of welded stainless steel tubing. EXPORTER: YES
AB	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Sintered Metal Components (Pty) Ltd Sacks Circle, Bellville South PO Box 156, Bellville 7535	A.F.P. Lynch, Man. Dir. H. Itter, Gen. Man. Tel: (021) 9512311 Fax: (021) 9512116	Sintered precision components for the agricultural, automotive, electrical, mining and general engineering industries. Self lubricating bearing material, sintered filters. EXPORTER: YES
	DORBYL LIMITED – TOSA Division Tosa Precision Tube Houtkop Rd, Duncanville PO Box 1643, Vereeniging 1930	P. Waetzel, Man. Dir. S. Zeelie, Sales Man. Tel: (016) 42106 Fax: (016) 43376	A214/A450, cold rolled rounds, squares, rectangulars, ovals, aluminised rounds. EXPORTER: YES
ABC	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** Univel Transmissions (Pty) Ltd Bennett St, Neave Township, Port Elizabeth PO Box 14440 Sidwell 6061	A.F.P. Lynch, Man. Dir. H.P. Rieger, Mark. Man. Tel: (041) 412892 Fax: (041) 411545	Front wheel drive axles. EXPORTER: NO
A	**DORBYL AUTOMOTIVE PRODUCTS (Pty) Ltd** 20 Henry Ford Rd, Pullmaflex, Neave Township PO Box 4297, Korsten 6014	A. Pearce, Gen. Man. Tel: (041) 431414 Fax: (041) 431420 Tlx: 245603	Seats. EXPORTER: NO
C	**DRIVETRAIN (Pty) Ltd** Cnr Proton & Molekule Sts Chloorkop Ext 1 PO Box 399, Kempton Park 1620	L.D. Lee, Man. Dir. Tel: (011) 9763075 Fax: (011) 9762193	Replacement parts suitable for the "Fuller" type truck gearboxes, complete truck gearboxes. EXPORTER: NO
D	**DULUX (Pty) Ltd (AECI Group)** 8 Juyn St Alrode PO Box 3704, Alrode 1451	T. Munday, Man. Dir. J. Assheton-Smith, Bus. Man. Tel: (011) 8611000 Fax: (011) 8646701 Tlx: 740304	Electrocoats, primers, top coats. EXPORTER: YES
	FELTEX AUTOMOTIVE PRODUCTS (Pty) Ltd 39 Paisley Road, Jacobs PO Box 12222, Jacobs 4026	M.I.C. Stark, Man. Dir. Tel: (031) 484343 Fax: (031) 489631 Tlx: 624360	Head Office of units.
B	**FELTEX AUTOMOTIVE COMPONENTS** 55 Paisley Road, Jacobs PO Box 12222, Jacobs 4026	M.I.C. Stark, Man. Dir. K.C. Mclachlan, Gen. Man. Tel: (031) 484343 Fax: (031) 484162 Tlx: 624360	Interior trim - moulded and cut parts, heat and sound insulation. EXPORTER: NO No. of employees: 118
B	**FELTEX AUTOMOTIVE ROSSLYN** 41 Martinus Ras Street, Rosslyn PO Box 911 – 106, Rosslyn 0200	M.I.C. Stark, Man. Dir. A. Fourie, Gen. Man. Tel: (012) 581604 Fax: (012) 5412898	Interior trim - moulded carpets and cut parts, heat and sound insulation, headliners. EXPORTER: YES No. of employees 299

BCD*	**FERODO (Pty) Ltd** 13–15 Joyner Rd, Prospecton PO Box 4983, Durban 4000	E.P. Waldburger, Man. Dir. D.A. Jones, Mark. Dir. Tel: (031) 923521 Fax: (031) 925168	Automotive friction materials, including disc brake pads, brake linings, clutch facings and moulded roll lining. EXPORTER: YES No. of employees: 470
ABC	**FHE AUTOMOTIVE TECHNOLOGIES (Pty) Ltd** 20 Otto Violek Rd, New Germany PO Box 788, New Germany 3620	A.J. Becker, Man. Dir. J.L. Peinke, Tech. Mark. Dir. Tel: (031) 7053670 Fax: (031) 7053186 Tlx: 623741	Brazed and mechanically jointed aluminium radiator manufacturers, heater/blower and air-conditioning systems, plastic tooling and injection moulding capabilities. EXPORTER: YES
B	**FILPRO (Pty) Ltd** 19 Birmingham Rd, Willowtown Pietermaritzburg PO Box 367, Pietermaritzburg 3200	N.D. Smith, Man. Dir. Tel: (0331) 902382 Fax: (0331) 902322 Tlx: 643475	Fram oil, air, fuel and hydraulic filters and facet industrial filters. EXPORTER: YES No. of employees: 481
BC*	**GABRIEL SA (Pty) Ltd** White Rd, Retreat 7945 PO Box 30214, Tokai 7966	F.V. Keywood, Man. Dir. L.M. Biden, Mark. Exec. Tel: (021) 721007 Fax: (021) 757203 Tlx: 526810 SA	Shock absorbers, Macpherson struts, strut cartridges (both in pressurised and non-pressurised designs), coil springs, gas stays, components and pressings. EXPORTER: YES No. of employees: 440
B*	**FIRST NATIONAL BATTERY CO. (Pty) Ltd** Cnr Settlers Way & Edison Rd Gately Township, East London PO Box 182, East London 5200	L. Laubscher, Man. Dir. S. van Niekerk, Fin. Dir. Tel: (0431) 311-111 Fax: (0431) 312-007 Tlx: 250659	Automotive batteries, industrial batteries – standby power/traction/load levelling. EXPORTER: YES No. of employees: 1 100
B	**GEARMAX (Pty) Ltd** Brickfield Road PO Box 388, Uitenhage 6230	H. Marston, Man. Dir. P.D. Aston, Sales Man. Tel: (0422) 9910880 Fax: (0422) 9228618 Tlx: 244117	Rear driving axles suitable for fitment on passenger and light/medium commercial vehicles and related components. Front and rear driving axles suitable for vehicles up to 6 000 kg gvm. Right angle drive for agricultural gearboxes. EXPORTER: NO No. of employees: 583
AB	**GEAR RATIO ENGINEERING** (Div. of Sandock Austral Ltd.) 8 Chris St, Alrode 1450 PO Box 124177 Alrode 1451	J.L. Goosen, Gen. Man. G.C. Buchanan, Mark. Man. Tel: (011) 8642170 Fax: (011) 9082244 Tlx: 746202 SA	High technology machined components, gears and gearboxes. EXPORTER: NO No. of employees: 350
BC*	**GIRLOCK (SA) (Pty) Ltd** 82 Electron Ave, Isando PO Box 59, Isando 1600	R.S. Wynne, Man. Dir. Tel: (011) 9746655 Fax: (011) 9742224 Tlx: 745300	Disc and drum brakes, clutch covers and clutch driven plates. EXPORTER: NO No. of employees: 373
BC	**GOLNIX C.C.** Mill St, Bellville South PO Box 342, Bellville 7535	C.J. Vermaak, Chief Exec. Tel: (021) 9512165 Fax: (021) 9512346	Glassfibre – Bonnets (trucks), fan shrouds, various body panels, seat pans. EXPORTER: NO No. of employees: 58
BC	**GRAPNEL** Neil Hare Rd, Atlantis PO Box 25, Wesfleur, Atlantis 7349	S. Eaton, Man. Dir. Tel: (0226) 73447 Fax: (0226) 71800 Tlx: 521679	Mild, aluminised and stainless steel exhaust systems for cars, LDV's, trucks. Mild & stainless steel tubing. Towbars, foreguards, bullbars. EXPORTER: YES No. of employees: 350
BCD	**GRUNDY SOUTH AFRICA (Pty) Ltd** T/A Grundy Techniform 22-28 Burman Rd, Deal Party Estate Port Elizabeth PO Box 2036, North End 6056	G.N. Tunstead, Man. Dir. D.J. de Vaux, Exec. Dir. Tel: (041) 432299 Fax: (041) 432224	Manufacturers and suppliers of automotive components, seat frames, pressings, machined parts, vehicle jacks, springs, wire forms and special service tools. EXPORTER: NO No. of employees: 326
B	**GUD FILTERS (ATLANTIS) (Pty) Ltd** Christopher Starke St, Wesfleur Atlantis PO Box 1495, Dassenberg 7350	B. van Breda-Smith, Man. Dir. Tel: (0226) 72514 Fax: (0226) 73390	Aircleaners for passenger cars, LCVs, MCVs and HCVs, oil and fuel filter assemblies for diesel engines. EXPORTER: NO No. of employees: 161
B	**HARVARD AND CRAFT ENGINEERING (Pty) Ltd** 5 Baksteen Road, Clayville Ext 11, Midrand PO Box 219, Olifantsfontein 1665	I.J. McAllister, Man. Dir. Tel: (011) 3162670 Fax: (011) 3162707	Tool and Die manufacturers, metal pressings and assemblies. EXPORTER: NO No. of employees: 120
BCD*	**HELLA (SOUTH AFRICA) (Pty) Ltd** Fitzpatrick St, Niven Industrial Township Uitenhage PO Box 277, Uitenhage 6230	C.D.M. Rist, Man. Dir. J.K.E. Ryan, Mark. Dir. Tel: (0422) 9229002 Fax: (0422) 9921714 Tlx: 245412	Automotive lighting specialists – headlights, wiring harnesses, hooters, signal lights, wheel trims, plastic mouldings, cable components and accessories, as well as industrial and domestic floodlights, bulkhead and utility lights. EXPORTER: YES No. of employees: 1 014

BC	**HUBCO FORGINGS CC** (Part of Auto Industrial Group) 110 Berrange Rd, Wadeville Ext 1 PO Box 14394, Wadeville 1422	T. D'Arcy, Admin. & Sales Dir. Tel: (011) 8270220 Fax: (011) 8272296	Pitman arms, idler arms, radius bars, door hinges, striker plates, stabiliser supports, clutch and pedal assemblies, jacks, spanners, side shafts, hub flanges, gear blanks, piston rods. EXPORTER: YES No. of employees: 160
BC	**HUCO ENGINEERING (SA) (Pty) Ltd** Unit B2, Boksburg Minipark 112 All Blacks Rd (West), Boksburg North PO Box 6668, Dunswart 1508	B. Henschel, Man. Dir. Tel: (011) 8923714/5 Fax: (011) 8922396	Electronic fuel pumps, voltage regulators, ignition modules, trailer plugs & sockets, ignition coils. EXPORTER: YES No. of employees: 12
D	**ISCOR Ltd.** PO Box 6318, Pretoria 0001 10th Floor, SAAU Building Cnr. Schoeman & Andries Sts Pretoria	W. van Wyk Manging Director J.C. van Zyl Manager - Trade Promotion Alt: O.G. Sheard Head Accounts Trade Promotion Tel: (012) 3202450 Fax: (012) 3201150 J.C. Jacobs: Manager - Domestic Sales; Manufacturing Industries PO Box 450, Pretoria 0001 Tel: (012) 2982014 Fax: (012) 3230253 Tlx: 322007 Alt: E.A. Loubser: Senior Sales Representative Domestic Sales - Manufacturing Industries Tel: (012) 2982751 Fax: (012) 3230253 Tlx: 322007 J. Barnard: Manager - Market Development Tel: (012) 2982139 Fax: (012) 3233284 Tlx: 322007	Primary steel products. EXPORTER: YES No. of employees: 55 565
B	**K BRAUN ENGINEERING (Pty) Ltd** Bruce Young PO Box 110, Butterworth, Transkei	W. Gauss, Man. Dir. L. Petzer, Costing Tel: (0474) 610141 Fax: (0474) 610433 Tlx: 50968-773	Exhaust systems, pipe bending, cross members. EXPORTER: YES No. of employees: 297
BC	**KILBER AUTOMOTIVE PRODUCTS (Pty) Ltd** Old Fuchs Complex, Vereeniging Rd, Alrode PO Box 11548, Randhart 1457	H. Berman, Man. Dir. Tel: (011) 9084634/9 Fax: (011) 9082216	Exhaust silencers, pipes for LDV, trucks off-road and specialised applications. EXPORTER: NO No. of employees: 90
BC	**KNORR-BREMSE (SA) (Pty) Ltd** 3 Derrick Road, Spartan PO Box 2411, Kempton Park 1620	A.W. Adlkofer, Man. Dir. J. Geldenhuys, Sen. Tech. Man. Tel: (011) 3943120 Fax: (011) 9751513 Tlx: 742348	Complete air brake systems for heavy trucks, trailers, specialised vehicles, locomotives, goods wagons, mainline coaches and other rolling stocks. Industrial pneumatic equipment. EXPORTER: YES No. of employees: 170
BC	**KOLBENCO (Pty) Ltd** 6 Liebenberg St, Alrode PO Box 3888 Alrode 1451	J.H. Fehrsen, Man. Dir. U. Roos, Tech. Dir. E.W.H. Fischer, Sales Dir. G.H. Seuffert, Fin. Dir. Tel: (011) 8647930 Fax: (011) 9084859 Tlx: 750359	Manufacturers of piston assemblies for petrol and diesel engines. Suppliers of engine components for OE and P & A. EXPORTER: YES No. of employees: 430
AB	**KROMBERG AND SCHUBERT SA (Pty) Ltd** School St, Wilsonia, East London PO Box 7246, East London 5200	H.O. Kromberg, Man. Dir. A. Bryer, Comm. Man. Tel: (0431) 451311 Fax: (0431) 451220 Tlx: 250949	Wiring harnesses. EXPORTER: NO No. of employees: 430
B	**LAURSENS DIV. OF BTR DUNLOP** Pepler St, Rosslyn PO Box 911-113, Rosslyn 0200	J.C. Evans, Gen. Man. D.A. Savage, Mark. Man. Tel: (012) 582751/4 Fax: (012) 5412811 Tlx: 320295	Automotive pressings and welded safety critical subassemblies such as cross members, suspension links, brake and clutch pedals, air cleaner assemblies. EXPORTER: YES No. of employees: 155

BC	**LECTROLITE (Pty) Ltd** Wankel St, Jet Park Ext 1, Boksburg PO Box 8038, Elandsfontein 1406	O.G. McCullough, Man. Dir. A. Gibson, Sales & Mark. Man. Tel: (011) 8231140 Fax: (011) 8232458	NGK spark plugs, Bougicord ignition wire systems. EXPORTER: NO No. of employees: 72
ABC*	**LUCAS AUTOMOTIVE (Pty) Ltd** 5 Yaron Ave, Lea Glen, Florida PO Box 30, Florida 1710	A.E. Dixon-Seager, Man. Dir. B. Farrell, OE Sales & Eng. Man. Tel: (011) 4723930 Fax: (011) 6743321/4708 Tlx: 425725 SA	Starter motors, alternators, ignition coils, solenoids. EXPORTER: YES No. of employees: 313
BC	**LUK AFRIKA (Pty) Ltd** (Formerly Repco of South Africa (Pty) Ltd) 58-64 Burman Rd, Deal Party, Port Elizabeth PO Box 9045, Estadeal 6012	L.H.P. Terblanche, Gen. Man. Tel: (041) 411281 Fax: (041) 433285 Tlx: 245024	Clutch assemblies, brake drums and wheel hubs. EXPORTER: YES No. of employees: 290
B	**MAGNUS INDUSTRIES (Pty) Ltd** Europlastifoam T/A 114 Phillips St, Rosslyn PO Box 911-558, Rosslyn 0200	S.P. Bazzini, Man. Dir. R. Janssen, Tech. Man. Tel: (012) 582386 Fax: (012) 5412775	Seat pads, seat squabs, headrests, arm rests, steering wheels, bumper strips, spoilers, front and rear mud flaps, body side mouldings. EXPORTER: YES
B	**MALACHI CARPETS (Pty) Ltd** 5 Diesel Street, Kruisriver Industrial Sites, Uitenhage PO Box 306, Uitenhage 6230	D.M. Edwards, Man. Dir. Tel: (0422) 9229444 Fax: (0422) 9923087	Moulded carpets in loop and cut pile. EXPORTER: NO No. of employees: 72
B	**MEGA PLASTIC** (Division of Sentrachem Ltd) Becker House, Peltier Drive, Sunninghill PO Box 672, Sunninghill 2157	R.L. Oxenham, Man. Dir. Tel: (011) 8036300 Fax: (011) 8035200 Tlx: 428722	Bumpers, hub caps, washer bottles, plastic grilles, plastic pipes and hoses, mirrors, plastic panels, fuel tanks, steering wheels. EXPORTER: YES No. of employees: 1 787
	METAIR INVESTMENTS LIMITED 3rd Floor 19 Girton Rd PO Box 9772, Johannesburg 2000	A.D. Plummer, Man. Dir. Tel: (011) 6434801 Fax: (011) 4843025 Tlx: 424636	Holding company of: Armstrong Hydraulics SA (Pty) Ltd, Metlink Manufacturing (Pty) Ltd, Motorubber Limited, Smiths Manufacturing SA (Pty) Ltd, Supreme Spring Systems (Pty) Ltd.
	2 Progress Rd, New Germany Pinetown PO Box 181, Pinetown 3600	B.C. Swinford-Meyer Manuf. & Tech. Director Tel: (031) 7194200 Fax: (031) 7194241 Tlx: 6251[illegible]	Associate Companies: First National Battery Co (Pty Limited, Hella (SA) (Pty) Ltd
BC	**METLINK MANUFACTURING (Pty) Ltd** Prospecton Plant and Head Office 39-41 Joyner Rd Prospecton Jacobs Plant: 1 Lerwick Rd, Jacobs, Natal PO Box 12779, Jacobs 4026	W.P. Janssens, Man. Dir. Tel: (031) 484264 Fax: (011) 488838 Tlx: 650097	Metal pressings, metal fabrications, rear load decks for LCVs, seat frames and springs, exhaust systems. EXPORTER: YES No. of employees: 1 109
BC	**MICROFINISH MANUFACTURING** 16 Ivy Rd, Pinetown 3610	A.M. Goodman, Dir. C.W. Howard, Fin. Man. Tel: (031) 7014181 Fax: (031) 7015385	Valve guides and small end bushes. EXPORTER: YES No. of employees: 30
BCD	**MINTEX DON (Pty) Ltd** (Div. of Valard Industries) Birmingham Rd, Nestadt Industrial Sites Benoni South PO Box 5237, Benoni South 1502	H.F.R. Pinho, Man. Dir. R.C. Bath, Tech. & Works Dir. Tel: (011) 8452767 Fax: (011) 545396	Disc brake pads, car, truck and P.S.V. linings; clutch facings and industrial friction components. EXPORTER: YES No. of employees: 360
BD	**MOLYSLIP LTD and R.J.W. SPANJAARD & CO. (Pty) Ltd** 748-750 Fifth St, Wynberg PO Box 1634, Halfway House 1685	R.J.W. Spanjaard, Chairman Tel: (011) 7862210 Fax: (011) 7865685 Tlx: 424293	Specialised lubricants, powdered brass, copper, graphite and molybdenum disulphide (MOS^2 powder. EXPORTER: YES No. of employees: 75
ABC	**MOTORUBBER (Pty) Ltd** Cnr Paul Smith St & Tile Rd Boksburg North PO Box 5123, Boksburg North 1461	H. Sassenberg, Man. Dir. Tel: (011) 527413 Fax: (011) 521615	Manufacturers of rubber and rubber-to-metal bonded automotive components. EXPORTER: YES No. of employees: 266
BC	**MOTOTECH (Pty) Ltd** Cnr. Andries St. & Rautenbach Ave, Wynberg PO Box 391626, Bramley 2018	R.F. Schilling, Man. Dir. Tel: (011) 7864890 Fax: (011) 8871958	Fender liners, under covers, trim components, Aerokits, wheel covers, mudguards - all out of HDPE or ABS styrene. Major vacuum-formers to the automotive industry. EXPORTER: YES No. of employees: 85
B	**M & R FOUNDRIES Ltd** Port Elizabeth Foundry Stanford Rd, Korsten, Port Elizabeth PO Box 1815, Port Elizabeth 6000	J.E. Crowe, Div. Man. P.J. Mills, Fin. Man. Tel: (041) 432626 Fax: (041) 412037 Tlx: 242644	Grey, SG/SIM. and compacted iron and aluminium and aluminium castings for the automotive industry. EXPORTER: NO No. of Employees: 285

B	**M & R FOUNDRIES Ltd** Alberton Foundry 35 Radio Rd, Alberton North PO Box 13, Alberton 1450	R.B. Walker, Div. Man. A.J. Russell, Sales Man. Tel: (011) 8695341 Fax: (011) 9071736	S.G. iron and grey iron for the automotive general engineering. EXPORTER: YES No. of employees: 300
B	**M & R FOUNDRIES Ltd. – Gearing Foundry** 13–17 Grenville Ave, Epping Industria PO Box 4, Eppindust 7475	J.S. James, Man. Dir. P.E. Gibb, Sales Man. Tel: (021) 5316591 Fax: (021) 5314832 Tlx: 520310	Crey and ductile iron castings. EXPORTER: YES No. of employees: 285
. B	**M & R FOUNDRIES Ltd** Cnr. 1st Avenue & Andries Pretorius St Alberton North PO Box 278, Alberton 1450	G.H. Scott, Group Man. Dir. S. Smithson, Group Mark. Man. Tel: (011) 9072110 Fax: (011) 8691224	Head office of group. EXPORTER: YES
B	**M & R FOUNDRIES Ltd – Durban Division** 3 Clydebank Rd, Bayhead, Durban PO Box 12757, Jacobs 4026	A.R. Dalton, Div. Man. Tel: (031) 259431 Tel: (031) 255606	S.G. iron, grey iron and steel castings for automotive, sugar, marine and general engineering industries. EXPORTER: NO No. of employees: 216
	NATIONAL LAMPS (Pty) Ltd 2 Cloncore St, Grahamstown PO Box 246, Grahamstown 6140	S.P. Birt, Group Man. Dir. Tel: (0461) 27206 Fax: (0461) 228[illegible]	Motor vehicle bulbs and fuses. Torch, miners, railroad and airport bulbs, heavy duty electronic flasher/hazard units and silicone carbonless ignition leads. EXPORTER: YES No. of employees: 85
	NATIONAL LAMPS MARKETING (Pty) Ltd 769 6th St, Wynberg PO Box 554, Bergvlei 2012	S.P. Birt, Group Man. Dir. J.V. Ellmore, Man. Dir. Tel: (011) 7865613 Fax: (011) 7863904	No manufacture – Marketing Div. of National Lamps, Grahamstown. EXPORTER: YES No. of employees: 9
	NATIONAL SPRING (Division of Astas Automotive (Pty) Ltd) 238 Wadeville Road, Wadeville PO Box 14072, Wadeville 1422	C.A. Roberts, Man. Dir. L.C. Dockray, Sales Man. Tel: (011) 8241840 Fax: (011) 8241854 Tlx: 746731	Coil springs, leaf springs, stabiliser bars, tension rods, torsion bars. EXPORTER: YES No. of employees: 350
ABCD	**NF DIE CASTING (Pty) Ltd** Component plant: Jurie St, Alrode PO Box 3780, Alrode 1451 Wheel plant: 3 Botha Street PO Box 8780, Alrode 1451	K.W. Daams, Man. Dir. T.O. Volek, Comm. Dir. Tel: (011) 8642754 Fax: (011) 9083455 Tel: (011) 908-3060 Fax: (011) 908-3075/3074	Alloy roadwheels, oil sumps, tappet covers, starter motor brackets, intake manifolds, engine mounting brackets, clutch housings, timing chain covers, differential rear covers, water outlet fittings, alternator mounting brackets. EXPORTER: YES No. of employees: 570
BC	**OSRAM (Pty) Ltd** Cnr. Andries Pretorius Str and 1st Avenue, Alberton North PO Box 207, Alberton 1450	W. Winnerlein, Man. Dir. G. Boyle Sales Man. Tel: (011) 8698490/4 Fax: (011) 8698981 Tlx: 750350 OSRAM	Automotive lamps. EXPORTER: YES No. of employees: 142
[illegible]	**PABAR (Pty) Ltd** 7 Fransen St, Chamdor, Krugersdorp PO Box 4269, Luipaardsvlei 1743	V. Barbaglia, Man. Dir. E. Doneda, Gen. Man. Tel: (011) 7621266/7/8 Fax: (011) 7621260	Sheet metal pressings, tool & dies. EXPORTER: NO No. of employees: 140
BC	**PAYEN COMPONENTS SA Ltd** 71-77 Burman Rd, Deal Party Estate Port Elizabeth PO Box 9005, Estadeal 6012	W.D. Galloway, Man. Dir. Tel: (041) 411701 Fax: (041) 435934 Tlx: 242096	Automotive gaskets. EXPORTER: YES No. of employees: 170
BC*	**PILKINGTON SHATTERPRUFE SAFETY GLASS (Pty) Ltd** 1 Armourplate Rd, Struandale PO Box 810, Port Elizabeth 6000	P.J. Wagener, Man. Dir. F. Clephane, Mark. Man. Tel: (041) 424210 Fax: (041) 463637	Toughened and laminated safety glass, polyurethane mouldings (bumpers etc). EXPORTER: YES No. of employees: 2 572
BC	**PJ MANUFACTURERS (Pty) Ltd** 281 Fox Str, City & Suburban Johannesburg PO Box 9404, Johannesburg 2000	M.D. Dillon, Man. Dir. C.G. Emmett, Gen. Man. Tel: (011) 3374177 Fax: (011) 293498	Petrol tank locking caps, radiator caps, thermostats, radiator pressure testers, hooters, 'krookloks', hose clamps. EXPORTER: YES No. of emplyees: 60
D	**PLASTAMID (Pty) Ltd** (AECI Group) 43 Coleman St, Elsies River PO Box 59, Elsies River 7480	Dr. L. de Lange, Man. Dir. S. Mountain, Mark. Man. Tel: (021) 5921201 Fax: (021) 5921409	Engineering plastic raw materials i.e. nylon, polycarbonate, polypropylene, polyester, acetal, thermoplastic elastomers. EXPORTER: YES No. of employees: 21
ABC	**A. MAUCHLE (Pty) Ltd** t/a Precision Tools 6 Axle Drive, Midrand PO Box 732, Halfway House 1685	A.J. Mauchle, Man. Dir. A.A. Mauchle (Jnr), Exec. Dir. Tel: (011) 3162210 Fax: (011) 3163903	Automotive components, high precision components, jigs, fixtures and gauges, jigboring, internal and external cylindrical grinding, form grinding, broaching and honing, deep hole drilling and NC machining. EXPORTER: YES No. of employees: 120

BC	**PRETORIA MAT AND RUBBER (Pty) Ltd** Trading as: PREMAT Frans duToit St, Rosslyn PO Box 911-049, Rosslyn 0200	J.P.A. Visser, Man. Dir. B. Greyling, Admin. Dir. Tel: (012) 582115 Fax: (012) 582184	Woven rubber deckmats, tonneau covers and load body linings for light commercial vehicles. EXPORTER: NO No. of employees: 109
BC	**PRO SEAT (Pty) Ltd** 14 Napier Rd, Gately Township, East London PO Box 762, East London 5200	K. Poole, Gen. Man. J.C. Jooste, Asst. Man. Tel: (0431) 463545 Fax: (0431) 461275 Tlx: 250936	Commercial vehicle and car seats and special components. EXPORTER: NO No. of employees: 120
B	**PROTEA AXLES (Pty) Ltd** Van Dyk Road Industrial Sites Benoni PO Box 1810 Benoni 1500	J.R. Couldridge, Man. Dir. B. Humphrey, Gen. Man. Tel: (011) 9155050 Fax: (011) 9151245	Trailer axles and suspensions and parts thereof. Rockwell drive axle parts. EXPORTER: NO No. of employees: 30
B	**REGBAUDI ENGINEERING (Pty) Ltd** 32 Piet Rautenbach St, Brits PO Box 668, Brits 0250	C. Regazzi, Man. Dir. Tel: (01211) 502950/1/2/3 Fax: (01211) 502201 Tlx: 321785S	Suspension parts, door hinges, seat slides, metal pressings, ball joint tie rods. EXPORTER: YES No. of employees: 245
B	**REHAU POLYMER (Pty) Ltd** 13 Betschana Rd, Sebenza (sales office) Site 51 Fort Jackson, Ciskei (factory PO Box 924, Edenvale 1610	C.H. Buttcher, Man. Dir. Mr. E.A. Maderthaner, Tech. Sales Man. Tel: (011) 6091110 Fax: (011) 6091112 Tlx: 74305	Extruded, extrusion – blow moulded and injection moulded polymer components. EXPORTER: YES No. of employees: 100
B	**RENK (SA) (Pty) Ltd** Navada Centre – 4th Floor 68 Voortrekker St, Alberton PO Box 2028, Alberton 1450	C. Brink, Gen. Man. Tel: (011) 8697004 Fax: (011) 8698709 Tlx: 741502	The company uses sub-contractors to manufacture and assemble automatic gearboxes for heavy commercial vehicles. EXPORTER: NO No. of employees: 8
ABC*	**ROBERT BOSCH (Pty) Ltd** 33 Piet Rautenbach St Brits Industrial Sites PO Box 348, Brits 0250	G.A. Korths, Man. Dir. W.J. Nortje, Auto Sales Dir. Tel: (01211) 502170 Fax: (01211) 503646 Tlx: 322604	Starter motors, alternators, wiper motors, fan motors, blower motors, window winder motors, other small motors, ignition coils, electronic control units for fuel-injection/engine management, A.B.S. and electronic automatic transmission. EXPORTER: YES No. of employees: 1 100
	ROCKHAM INDUSTRIES (Pty) Ltd 635 South Coast Road Mobeni PO Box 32047, Mobeni 4060	T.S. Smith, Man. Dir. Tel: (031) 4690441 Fax: (031) 4690443 Tlx: 624483	Axle brackets, back plates, door hinges, handbrake lever assembly. Hinges: bonnet, boot lid, door. Hood: catch spring assembly, stays. Metal pressings: fine blanked, stampings, powder coatings. Seat: adjusting/reclining mechanism, frames, slide rails. Tooling: automotive. Tubular steel and components. EXPORTER: YES No. of employees: 238
BC	**SACHS S.A. (Pty) Ltd** 18 Bentonite St, Alrode Ext 7 PO Box 123908, Alrode 1451	H. Dieckmann, Man. Dir. M. Minihold, National Sales Man. Tel: (011) 8644765/9 Fax: (011) 8646924 Tlx: 750061	Clutches and Shock absorbers. EXPORTER: YES No. of employees: 117
AB	**SAFETY TRANSPORT INTER (Pty) Ltd** Cnr Charel Uys & Neil Hare Sts, Atlantis PO Box 1513, Dassenberg 7350	S. Elvin-Jensen, Man. Dir. P.M. Duncan, Fin. Dir. Tel: (0226) 71420 Fax: (0226) 71707 Tlx: 521329SA	Safety belts, child restraint seats and harnesses, motor vehicle rear view mirrors. EXPORTER: YES No. of employees: 242
	SALCAST – see Dorbyl		
	SALMAC – see Dorbyl		
BC	**SIEMENS Ltd** (Automotive Components) Unit 2, Fedlife Park, Tonetti St, Midrand PO Box 4583, Johannesburg 2000	D. Harris, Man. Auto. Comp. Tel: (011) 3151950 Fax: (011) 3151968	Electronic modules/assemblies, relays, laminated cables. EXPORTER: NO No. of employees: 30
BCE*	**SILVERTON ENGINEERING (Pty) Ltd** 318 Derdepoort Rd, Silverton PO Box 54, Silverton 0127	C. Cronje, Man. Dir. M. Norton, Sales Man.. Tel: (012) 861001 Fax: (012) 865874	Automotive radiators, condensers/evaporators, automotive fuel tanks, air receivers, transformer radiators/heat exchanger. EXPORTER: YES No. of employees: 465
	SINTERED METAL – see Dorbyl		
BC	**SKF BEARING MANUFACTURERS (Pty) Ltd** Brickfields Rd, Uitenhage PO Box 4, Uitenhage 6230	E.J. Schindler, Man. Dir. J. Garbers, Co. Sec. Tel: (0422) 24014 Fax: (0422) 24063 Tlx: 244156	Ball and taper roller bearings. EXPORTER: YES

BC	**SKF SOUTH AFRICA (Pty) Ltd** 47 Jones Rd, Witkoppie PO Box 13157, Witfield 1467	N. Bonde, Man. Dir. W. Benadie, Man. Auto. Bus. Tel: (011) 3971710 Fax: (011) 3971140 Tlx: 749803	Sales office of SKF Uitenhage. EXPORTER: YES
BC	**SMITHS MANUFACTURING (SA) (Pty) Ltd** 2 Progress Rd, New Germany PO Box 181, Pinetown 3600	J.W. Badenhorst, Man. Dir. N.D. Dewar, Fin. Dir. Tel: (031) 7194911 Fax: (031) 7194222 Tlx: 625110	Heaters, blower motors, wiper motors, cooling fans, plastic injection mouldings, air conditioner assemblies and components including pipe and hose assemblies, drier bottles, injection mouldings up to 1 300 ton condensor and evaporator coils. EXPORTER: YES No. of employees: 883
B	**SP METAL FORGINGS CC** 70 Paul Smit St, Boksburg North PO Box 9152, Brentwood Park 1505	S. Messi, Exec. memb. Tel: (011) 8947771/4 Fax: (011) 8946255 Tlx: 740835	Forgings such as: flanges, gear levers, brackets, rods, and all general forgings in either forging condition or machined, wheel hubs, spindles and hooks. EXPORTER: YES No. of employees: 55
AB	**STATELINE PRESSED METAL (Pty) Ltd** 36 Stephenson Rd, Queendustria, Queenstown PO Box 320, Queenstown 5320	D.R. Soden, Man. Dir. B.W. Wienekus Fin. Dir. Tel: (0451) 88020 Fax: (0451) 88526 Tlx: 253025	Medium to major automotive sheet metal pressings, automotive body panels. EXPORTER: YES No. of employees: 245
B	**STEELMOBILE ENGINEERING (Pty) Ltd** Cnr Kitshoff & Gaigher Sts, Rosslyn PO Box 911-342, Rosslyn 0200	W.G. Boyd, Man. Dir. Tel: (012) 5412300 Fax: (012) 581906 Tlx: 320296	Automotive tooling, sheet and metal pressings and assemblies. EXPORTER: YES No. of employees: 1 054
B	**SUPREME SPRING SYSTEMS (Pty) Ltd** 45 Johnston Road, Pretoriusstad, Nigel PO Box 1529, Nigel 1490	W.F.G.L. Slieker, Man. Dir. Tel: (011) 8141160/7 Fax: (011) 7397262 Tlx: 747218 SA	Automotive leaf springs, coil springs, torsion bars and stabiliser bars. Industrial coilsprings and leaf springs. EXPORTER: YES No. of employees: 288
	TIGER WHEELS HOLDINGS Ltd 23 Western Boulevard City West Johannesburg PO Box 42499, Fordsburg 2033	E. Keizan, Joint Chair./C.R.O. R. Meyers, Export Dir. Tel: (011) 8337177 Fax: (011) 8367669 Tlx: 484070	Head office. EXPORTER: YES No. of employees: 400
BC	**TIGER WHEELS BABELEGI (Pty) Ltd** 111 3rd St, Babelegi Bophuthatswana PO Box 447, Hammanskraal 0400	E.N. Couzyn, Man. Dir. Tel: (01464) 79056/7 Fax: (01464) 79058	Alloy wheels. EXPORTER: YES No. of employees: 300
D	**TIMKEN SOUTH AFRICA (Pty) Ltd** 1 Edinburgh Road, Benoni South PO Box 5050, Benoni South 1502	A.B. Francis, Man. Dir. S.W.J. Hamilton, Reg. Man. Sales S.H. Benger, Sales Eng. Tel: (011) 9142900/2909/20/29 Fax: (011) 9141648 Tlx: 741516 SA	Timken tapered roller bearings. EXPORTER: YES No. of employees: 228
	TOSA – see Derbyl		
ABC	**T & N HOLDINGS LTD** 4th Floor Unilever House 2 Aliwal St, Durban PO Box 1527, Durban 4000	W.W. Cooper, Chief Exec. Tel: (031) 322679 Fax: (031) 377141 Tlx: 622329	Plain, shaft bearings, pistons, liners, gudgeon pins, iron castings, engine components for reciprocating applications, bearings, valves, friction materials, including disc brake pads, brake linings, clutch facings, radiators, aluminium radiators, condensers/evaporators, fuel tanks, air receivers, transformer radiators/heat exchanger and gaskets. EXPORTER: YES No. of employees: 3 075
BC	**TOWMASTER (Pty) Ltd** Edenvale Rd, Germiston PO Box 752, Germiston 1400	T.E. Rand, Man. Dir. A.D. Harris, Mark. Man. Tel: (011) 4554320 Fax: (011) 4555194	Towbars, trailers, bushbars, cowcatchers, rollbars. EXPORTER: NO No. of employees: 186
BC	**TRICHAMP COMPONENTS Ltd** Cnr. Brewery & Isando Rds Isando PO Box 88, Isando 1680	C. Goodwin, Man. Dir. W.V. Malkin, Mark. Dir. Tel: (011) 9741751 Fax: (011) 9746788	Champion spark plugs, Champion and Trico wiper blades, arms and linkages. EXPORTER: YES (Limited areas) No. of employees: 280
CD	**UNIVERSAL CLIPS (Pty) Ltd** 6 Factory St, Industria North, Roodepoort PO Box 58124, Newville 2114	N. Vickery, Man. Dir. Tel: (011) 4771310/4 Fax: (011) 4777476	Hose clamps, split pins, specialised automotive spring and fastening components, heavy duty clamps and T-bolt clamps. EXPORTER: NO No. of employees: 117

B	**UNITED STAMPING PLANT CC** 10 Pendoring St, Brits PO Box 885, Brits 0250	W. Hammel, Joint Man. Mem. Tel: (01211) 502160 Fax: (01211) 503028	Stamping and tools for stamping for the automotive industry. EXPORTER: YES No. of employees: 96
CD	**VACUFORM (Pty) Ltd** 155 Van Eden Singel, Rosslyn East PO Box 911-312, Rosslyn 0200	H.F. Combé E. Grammel, Joint MD's Tel: (012) 5411575/6 Fax: (012) 5411574	Trim components, aerokits and related accessories. Reaction injection moulding, integral and semirigid. Foam-filled parts, spoilers, energy absorbing foam and parts of bumper systems, vacuum formed mudguard liners, inner liners, car consoles, metal reinforced PU-parts, under covers, battery covers, grilles, wheel covers, laminated car interior parts, parcel shelves and shrouds. EXPORTER: INDIRECT No. of employees: 27
C	**VAN ZYL SPRING WORKS JHB. (Pty) Ltd** 20 Rosettenville Rd, Village Main PO Box 8501, Johannesburg 2000	A. Kunovsky, Man. Dir. F.A. Jackson, Accountant Tel: (011) 3315821 Fax: (011) 3312134 Tlx: 9451154	Automotive and industrial springs. EXPORTER: YES No. of employees: 110
C	**WABCO CLAYTON AUTOMOTIVE BRAKE** Division of Sturrock & Robson Ind. Ltd 14 Rendell Rd, Wadeville PO Box 14055, Wadeville 1422	C.F. Tippett, Exec. Dir. Tel: (011) 8241720 Fax: (011) 8241727	Airbrake and other pneumatic systems for heavy commercial vehicles. EXPORTER: YES No. of employees: 70
BC	**WESTINGHOUSE BRAKE & EQUIPMENT (Pty) Ltd** 40 Main Reef Rd, Benrose PO Box 27220, Benrose 2011	B.G.C. White, Man. Dir. D. Teubes, Sales Man. T. Gradidge, Main Dbn. Mnfrg. V. Ramsammy, Cust. Serv. Man Tel: (011) 6183380 Fax: (011) 6141226 Tlx: 487215	Braking system for heavy vehicles. EXPORTER: YES No. of employees: 48
B	**Z & D TOOLMAKERS (Pty) Ltd** Cnr Fred Otto & Phillip St, Rosslyn PO Box 911-909, Rosslyn 0200	O.K. Zehner, Man. Dir. J.O. Zehner, Dir. Tel: (012) 5411881/8/9 Fax: (012) 581246	Metal pressings and weld assemblies, plastic injection moulded parts and assemblies, assembly in combination i.e. metal/plastic. Warning triangles to SABS specifications, plastic injection & metal pressings. EXPORTER: NO No. of employees: 92
B	**ZF OF SOUTH AFRICA (Pty) Ltd** 170 Herman Rd, Meadowdale Ext 3 PO Box 2[illegible]98, Kempton Park 1620	B.P. Taylor, Man. Dir. F.X. Laubscher, Mark. Man. Tel: (011) 4531818 Fax: (011) 4537506	Suppliers of transmissions, steering systems and axles, new and remanufactured units to OE and P & A vehicle manufacture and other. EXPORTER: YES No. of employees: 94

APPENDIX 14

Visits made - by type, by country

September - November 1992

1. COMPONENT MANUFACTURERS

ZIMBABWE

- Amtech Engineering (Pvt) Ltd. Harare, 16 September - Castings - master cylinders, pump and bell housings
- Auto-electrical Product Manufacturing Co. (Pvt) Ltd. Harare, 28 September - Lamps, electrical alternators & electrical fittings.
- CT Bolts (Pvt) Ltd. Bulawayo, 10 October - Fastenings of all types.
- Can-Des Auto Electrical (Pvt) Ltd. Bulawayo, 23 September - Electric motor rewinds, auto electrics, diesel fuel injection.
- O Connoly & Co. (Pvt) Ltd. Bulawayo, 10 October - Castings.
- Dunlop Zimbabwe Ltd. Bulawayo, 22 September - Tyres, inner tubes, door seals, hoses.
- Eastern District Engineers (Pvt) Ltd. Mutare, 6 October - Castings, trailer axles
- Ferodo Ltd. Harare, 17 September, - Brake shoes and linings, clutch pressure plates and facings.
- KLG Spark Plug Ltd. Gweru, 21 September - Spark plugs
- Kenrose Filters (Pvt) Ltd. Mutare, 6 October - Crosland filters (fuel, oil, air).
- Mike Appel Organization Ltd. Harare, 29 September - Engine reconditioners
- Payen Zimbabwe (Pvt) Ltd., Bulawayo, 22 September - Engine and sealing gaskets.
- Radiator and Tinning (Pvt) Ltd. Bulawayo, 23 September and 10 October - Sheet metal and pressings, radiators, heat exchangers.
- Toolmaking and Engineering Co. (Pvt) Ltd. Bulawayo, 21 September - General components.
- United Spring and Forging Co. (Pvt) Ltd., Bulawayo - 10 October - Road springs and fastenings.

BOTSWANA

- Taurus Batteries (Pvt) Ltd., Gaborone, 15 October - Chloride batteries (Licence).

ZAMBIA

- Engine Reconditioners of Zambia, Lusaka, 19 October - Engine reconditioning.

TANZANIA (all in Dar-es-Salaam area)

- Afro Cooling Systems Ltd., 29 October - Radiators, heat exchangers
- Automec Ltd., 29 October - Engine, gearbox, clutch, brake refurbishment

- Tasia Spring Industries & Autoparts Ltd., 28 October - Leaf springs, filters, auto bulbs, brake linings and fluid

KENYA (Nairobi)

- Associated Gasket Manufacturers Ltd., 3 November - Engine gaskets.
- Autofilters Ltd./R.B. Shaw Ltd., 2 November - Crosland Filters, Mintex Brake pads and shoes
- Autosprings Ltd., 2 November - Leaf springs, bolts, fastenings and wiring looms.
- Burns and Blane Engineering Ltd., 4 November - Agricultural trailers and implements.
- Firestone East Africa (1969) Ltd., 4 November - Tyres.
- Hill Products (K) Ltd., 4 November - Shock absorbers.
- Megh Cushion Industries Ltd., 2 November - Seats and trim.

ITALY (Turin)

- IVECO SpA, 5/6 November - Castings, forgings and machining.

2. **PARTS WHOLESALERS, RETAILERS:**

ZIMBABWE

- Baron Motor Spares, Bulawayo, 23 September - Engine parts
- Engine Spares (Mike Appel),Harare, 29 September - Engine and general parts
- Teamtec, Bulawayo, 23 September - Steering, suspension and general parts.

BOTSWANA (Lusaka)

- Carally Auto-electrical and Diesel Services, 15 October - Lamps, solenoids, other electrical equipment.
- Motovac (Pty) Ltd., 15 October - full range of engine and automotive parts
- Taurus Batteries (Automotive Div), 15 October - full range of auto electrical parts

ZAMBIA

- Automotive Equipment Ltd., Lusaka, 22 October - full range of engine and automotive parts

TANZANIA (Dar-es-Salaam)

- Comafric Ltd., 27 October - Full range of engine, automotive and electrical parts.

KENYA (Nairobi)

- General Motors Kenya Ltd., 3 November - Parts for Opel, Isuzu
- Toyota Kenya Ltd. (Motor Mart Group Ltd) 4 November - Parts for Toyota, Mitsubishi, Fiat, Massey Ferguson, Hanomag, Yamaha

3. **VEHICLE ASSEMBLERS/BODY MANUFACTURERS**

ZIMBABWE

- Amtec Engineering (Pvt) Ltd.. Harare, 16 September - Mazda, Nissan, Peugeot, Pick-ups
- W.Dahmer & Co. (Pvt) Ltd.. Harare, 16 September - AVM Buses and Trucks
- Hubert Davies Ltd., Bulawayo, 22 September - ERF Truck Builder
- Leyland DAF (Zimbabwe) Ltd., Harare and Mutare, 14 September and 7 October - Leyland, DAF, Hino, Daihatsu trucks, Nissan and Mitsubishi cars and pickups and Land Rover.
- Willowvale Motor Holdings (Pvt) Ltd., Harare, 17 September and 13 October - Mazda cars and pick-ups, Peugeot, Toyota cars, Bedford, Scania trucks and Fiat, Ford, and Massey Ferguson tractors
- Zambesi Coachworks Ltd., Harare, 17 September - Tankers, vans, buses.
- Zimbabwe Motor Distributors (Pvt) Ltd., Harare, 25 September - AWD/Bedford

BOTSWANA

Nil

ZAMBIA

Nil

TANZANIA

Nil

KENYA (Nairobi area)

- Kenya Vehicle Manufacturers Ltd., 3 November - Land Rover, Suzuki, Leyland DAF, Nissan, Mitsubishi, Mazda

4. **DISTRIBUTORS**

ZIMBABWE

- Cummins Zimbabwe (Pvt) Ltd., 1 October - Diesel engine sales and distribution
- Duly's (Pvt) Ltd., 1 & 8 October - Main dealer Ford, Isuzu, Renault, Mazda and Nissan cars, trucks and tractors and Perkins engines.
- Puzey & Payne Ltd., 6 & 13 October - Main dealer for VW, Land Rover, Peugeot, BMW cars and Iveco trucks
- Zimbabwe Automotive Industries, 9 September - 14 October - Importer and distributor, Fiat cars and Iveco trucks.

BOTSWANA (Gaborone)

- Motor Centre Botswana (Pty) Ltd., 16 October - Main dealer Toyota, BMW and Mercedes, car and truck.

ZAMBIA (all Lusaka)

- Duly Motors (Zambia) Ltd., 20 October - Main dealer - Ford, Fiat, Mazda & AVM.
- Marunouchi Manufacturing and Distribution Co. Ltd., 20 October - Mitsubishi cars and trucks
- Mobile Motors Zambia Ltd., 23 October - Importer for Toyota
- Motor Holdings Zambia Ltd., 19 October - Main dealer Land Rover, Toyota, VW, Audi

TANZANIA

- Nil

KENYA (Nairobi)

- D.T. Dobie and Co. (Kenya) Ltd., 30 October - Nissan, Mercedes

5. FLEET OPERATORS

ZIMBABWE (Harare)

- CMED (Ministry of National Supplies) 30 September - Government fleet
- Swift (Unifreight Ltd.), 29 September - International transport organization
- United Transport Group Services Ltd. - 1 October - International transport organization
- Zimbabwe Urban Passenger Company - Zupco - National bus operator

BOTSWANA (Gabarone)

- Ministry of Works, Transport and Communications, Central Transport Organization, 16 October - Government fleet

ZAMBIA (Lusaka)

- Contract Haulage Ltd. 22 October - Parastatal - International transport organization
- United Bus Company of Zambia Ltd. Parastatal, 23 October - National bus operator

TANZANIA

Nil

KENYA

Nil

6. GOVERNMENT DEPARTMENTS COMMERCIAL/TRADE ORGANIZATIONS

ZIMBABWE (Harare)

- British High Commission, 11 September - 14 October - First Secretary (Commercial) and Commercial Officer
- Central Statistical Office, 25 September - Research and Information Officer
- Coopers and Lybrand Associates, 17 September - Management Consultants
- Commonwealth Development Corporation, 18 September - Representative for Zimbabwe
- Ministry of Industry & Commerce, 8 October - Assistant Secretary, Policy & Planning
- Ministry of Physical Planning, 15 September - Consultants, Dept. of Road Transport Planning
- Ministry of Transport - Central Vehicle Registry, 7 October - Senior Officer
- Motor Industry Employers Association, 8 October - Chairman
- Motor Trade Association 8 October - President, Chairman and Executive Director
- Standards Association of Zimbabwe, 29 September - Director General
- Transport Operators Association, 1 October - Chairman
- Zimbabwe Investment Centre, 12 October - Director
- Zimbabwe National Chamber of Commerce, 8 October - President

BOTSWANA (Gaborone)

- Ministry of Commerce and Industry, Dept. of Trade & Investment Promotion, 16 October - Principal Commercial Officer
- Ministry of Commerce and Industry, Dept. of Industrial Affairs, 16 October - Principal Industrial Officer
- Ministry of Works, Transport and Communications, 16 October - Senior Planning Officer

ZAMBIA (Lusaka)

- Ministry of Commerce and Industry, 22 October - Director of Industry
- Ministry of Power, Transport & Communications, 20 October - Road Traffic Commissioner
- Ministry of Works and Supply, 22 October - Permanent Secretary
- PTA Headquarters, 19 October
- Zambia Confederation of Industries of Chambers of Commerce, 20 October - Chief Executive

TANZANIA (Dar-es-Salaam)

- Ministry of Industries & Trade, 26 October - Acting Director, Heavy Industries
- National Insurance Corporation, 27 October - Senior Official
- State Motor Corporation, 29 October - Director of Planning and Development

<u>KENYA</u> (Nairobi)

- Kenya Motor Industry Association, 30 October - Trade Association Executive
- Ministry of Industry, 30 October - Deputy Director

REPRESENTATIVE SUPPLIERS OF GOODS TO THE AUTOMOTIVE SECTOR

Supplier	Goods supplied
Arthur Garden (Pvt) Ltd.	Line brakes, air filter elements, automatic fluid filters, hydraulic oil filters and air line connections.
Astra Paints (Pvt) Ltd.	Paint. Rubbing compound, polish, metal filler, body filler, floraglaze and abrasives.
Aveling Barford (Pvt) Ltd.	Reducing bushes, BSP dryseal plugs, bundy tubing, dry seal elbows, dry seal unions and reducing nippies.
Andrew Phillips (Pvt) Ltd.	Bundy tubing, nylon tubing and abrasives
Bellamy and Lambie (Pvt) Ltd.	Dry seal unions, elbows, QR valves, bundy tubing and brake couplings.
Bestobell (Pvt) Ltd.	PVC hose, cutting paste, grease gun connections, nipples, elbows, flanges and valves.
Bosal (Pvt) Ltd.	Exhaust systems.
Baldwins (Pvt) Ltd.	Round mild steel, stainless steel.
Berick Plasbond Ltd.	Upholstery piping, black seaming cord.
Bonar Industrials Ltd	White cotton rope No 6 and sash cord.
Benmac Manufacturing Ltd	Hose clips.
Brake and Clutch (Pvt) Ltd.	Gaskets for 2 wayf uel taps, radiator repairs.
Brockhouse (Pvt) Ltd.	2" Davis 5th wheels, tow hitch sets.
British Metal Corporation Ltd	5 kgs. Fryolux 30%.
Bulk Packaging Ltd	Paper sacks (908mm x 406mm x 4ply).

Supplier	Goods supplied
Capri Corporation Ltd	CMED number plates, red reflective triangles, chevrons, blanks and GMV labels, aluminium plates.
Caridorn (Pvt) Ltd	Polishing wheel cement, emery wheels A24.
Centraflex (Pvt) Ltd.	Exhaust systems, radiator pipes to oil cooler, exh. brackets, straps, elbows and flexible pipes.
Cernol Chemicals Ltd.	Bonderite 100, 723, accelerator 130, Chemserve LRA, Magnus Magnusol (super) testing solution, Chemserve B30 and dewatering oil, barrier cream, etc.
Champions (Pvt) Ltd	Masking tape, rivets, s/t screws, chassis punch, dymo tapes and hacksaw blades, etc.
Chris Seconds Electrical Ltd.	Plugs, switches, sockets, fuses, PVC auto flex cables, insulators, bulbs, globes, bandit straps and buckles etc.
Corbett & Johnson Ltd.	Secondary welding cables, UNF taps, die nuts, tools, chassis punch, ratchet extensions and scissors.
Corval (Pvt) Ltd.	Nylon thread, easy - outs sets No. 5, Q.I. tubes and various tools.
Cotton Waste Co Ltd	Mutton cloth, top grade cloth rags.
C.T. Bolts Ltd	Bolts, nuts, spring washers, rivets, washers and hose clips.
Compair (Pvt) Ltd.	Couplings.
Capri Engineering Ltd.	Propshafts (reconditioned)
Columbus McKinnon Ltd.	Hammer locks, hercalloy hooks, chain links, galvanised knotted chain, etc.
Consolidated Motors Ltd.	2½" amber reflective discs, rubber hose.
Cairns Motors Ltd	Bulblamps B.
Castrol Zimbabwe Ltd	Various oils as specified.
Central Spares (Pvt) Ltd.	6' Chevrons, hoseclips.
Dennison & Armstrong Ltd.	Extrusion guns, (KENMAR), Spotweld sealer, filler strip No. 103, silicon cartridges, Bostick 1514 and 142, clicker knife handles and blades, cradle caulking guns.

Supplier	Goods supplied
Diesel Electric Ltd.	Connectors, flat plug Bosch, switches, flasher units, nipples, sockets, blue beacons and spotlights.
Drury Wickman Ltd.	Drills tap wrenches, Jacobs Chuck keys K13, turning tools, parting tools, steel saw blades and various tools.
Dulux Paints Ltd.	Paint. Rubbing compound, Duco NO. 7, polish, ochre tinters, polychromatic paste and retarder thinners.
Dunlop Ltd.	Tyres, tubes, flaps, seat diaphragms, suspension rubbers, heel pads, rubber hose, high pressure hose, Z76 adhesive, belting, air hose, insertion rubber.
DRG Sacks Ltd.	Paper sacks (908mm x 406mm x 4ply).
Electrosales Ltd.	Pan Head machine screws and Jubilee clips.
Exide Electric Ltd.	Batteries.
Expandite (Pvt) Ltd.	G2/3 release plate spring for MK2 "G" guns, spot weld sealer, sealing strop, non-sag sealer, white sealstic, extrusion guns, cradle caulking guns, Dow Corning 781 Building Sealant.
Elastics & Tapes Ltd	Twill tape 25mm.
Eastern Districts Engineers	33" laminated drawbar springs, exhaust silencer clamps.
Economy Wholesales Ltd.	Illuminating paraffin.
Edgar Allen (Pvt) Ltd.	4mm x 4,5mm straight wire.
Field Technical Sales	A4 Norton mounted points, pop rivets - (Waterproof), bundy tubing, emery wheels, double connectors, recorder charts, etc.
F R Fernandes Ltd.	Nylon organdie material.
Gasket & Cutting Div.	Door liner boards, heat fusible sound deadner, trunk front trim boards, gaskets, board rear seat backs, spare-wheel plywood 3mm cover boards, etc.
GDR Pneumatics Ltd	Hose clips, tee pieces for air brakes, connectors, banjo connectors, air drills, olives, nipples, bundy tubing, trailer brake couplings, inline pipe connectors, pipe elbows, etc.

Supplier	Goods supplied
Geddes Limited	Industrial grade castor oil.
Gilmour Engineering Ltd.	Mounting bushes for Pulsar, Lancer, retaining pins.
Glynns bolts and fasteners.	Bolts, nuts, fasteners and copper washers.
Halsted Brothers Ltd	Various tools, hardware, Trinepon, paint, etc.
Harrison & Hughson Ltd.	Wheel weights.
J S Holland Ltd.	Castrol LM grease, brake fluid, oils, wrapping paper, toilet rolls and Icematic Claris.
L R Hooper Ltd.	Rotary file conical and mole wrenches.
Haggie Wire and Rope Ltd.	Galvanised wire rope.
Hubert Davies Ltd.	Welding wire, Lynx WFU brushes, Senco staples, spot weld electrodes, paint, feeder springs NO. 75A.
Norman Hughes & Co.	BMS wire in straight lengths.
Hunslet Engineering	Spherical inserts for front exhaust pipes.
Industrial & Domestic Wear	Overalls, dust coats, messengers uniforms, aprons, green canvas.
Industrial Hardware Ltd.	Tools, tape, spanners, socket, ratchet extension, punches, dust masks, waterpaper, abrasive cones, emery tapes, pump screwdriver, Allen keys, threadtapes, masking tapes, bundy tubing.
Ingersoll Rand Co. Ltd.	Cylinder head gaskets, valvecover gaskets, valve guides.
Industrial Agencies	Martindale masks, white dust coats, white overalls and filter pads.
L D Ineson Ltd.	Penetrating oil aero spray, nails, Eveready Batteries, tools, black dymo tapes.
Johnson and Fletcher Ltd.	Jubilee clips
Kamativi Tin Mines Ltd.	Kamative body solder 30/70% and 25/75%.
Karina (Pvt) Ltd	Bark highlight carpets (Code 29), ½" and 1" jute felt, suede highlight carpet (Code 26).

Supplier	Goods supplied
Kensham Chemicals	Bostick exhaust sealer.
R E King (Pvt) Ltd.	A4 Norton mounted points, dark protective spectacles, ear mufflers, tools, tapes, swivel castors, emery wheels, polishing wheel, cement drills, etc.
H R Kuttner (Pvt) Ltd.	Spot weld tips, capacitors, welding points, Mallory tips, module 213.061. staples X1173 Xmeco weld guns, Mallory metal blanks, Kickless cables 300MCM.
Labels Industrial	Green self-adhesive labels - large - round. Red self-adhesive labels.
Lever Brothers Ltd.	Royal powder, blue soap bars, Nobla, Virasoft, key powder, Lifebuoy soap, Vigour powder.
Lysaght and Co Ltd	Mild steel flat, MS angles, plate and sheets.
Manica Leather	Chamois leather.
Manical and Welders	Bushes, pins for tank brackets, heavy duty tow pins.
Mine Elelectrical Ltd.	Loctite 277, Stalok - green.
Mine Safety Appliances	Dark protective spectacles, Vinglo face shields.
Mining and Engineering	Dollies No. 551/552, panel beaters hammers, tap extractors, tools, die nuts, taps and drills.
Mobile Electrical Ltd.	Neoprene cup washers, bus bar copper, fluorescent tubes, bulbs, electrical equipment, power saw blades TPI, electrodes, Saunders valves, fuses, Bandit steel tapes, buckles, insulating tapes, vee belts, sockets, etc.
B. Morar and Sons	Leather canopy straps for Land Rover.
Motor Car Equipment	Torque wrench REPCO, Dollies No. 554.
Mowats Industrial Suppliers	Polishing wheel cement.
Mutare Clothing Ltd.	Overalls, dust coats, white buttons.
Mortons Motor Spares	Flexcord, Permaseal gasket sealer cement, masking tapes.
Minnesota Mining Mnf. Ltd.	Water papers, abrasive discs, cones, abrasive belts, reflective discs, masking tapes, scalloped 7" discs.

Supplier	Goods supplied
Mobil Oil Ltd.	Solvesso 90/10.
Motor and General Ltd.	Axle furniture and spring saddles, flanges drive in-puts, drop arms.
Mutare Board and Paper Mills	Cardboard 750 micron pieces.
National Chemical Products	Duco thinners 200 line and 300 line.
James North Ltd.	Vinyl and headlining material, clogs, welders leather gloves, PVC coated red gloves, welders spats, gum boots, dust masks, Wilson face shields, Chukka safety shoes, Proto safety shoes.
NEI Cochrane Ltd.	Passet flam rods and drill bits.
Nolan Electronics	Penlit cells, torch cells and Eveready batteries.
Samuel Osborn Ltd.	Fluid needles, parts for Devil bis spray guns, pet cocks, hose connectors, spray guns, Ben air couplers, drill chucks.
Oxyco Limited	Contact tips, CO^2 regulators, welding wire, Vitemax electrodes, silicone release agent, brazing rods, clear welding lens, unbronze brazing flux, oxygen, acetylene, CO^2, Handigas, Handigas burners, cutting nozzles, Saffire nozzles, Fryolux 30% solder, easy flosolder, ferron electrodes, triple flints, spares, printed circuit boards.
Phoenix Brushware	Plant brushes, bristles, leather dusters.
Pigott Maskew Ltd.	Insertion rubber, glazing rubber, fuel filter pipes for L/Rover, Clayton-rite rubber and filler, hoses.
Pilkington Glass Zimbabwe	Glass sets for variou models.
Plant and Equipment	Air cleaner elements, hydraulic air filter.
Prodorite Ltd.	Blaco rubberiser, sound deadner, PVC hoses,
Radiator and Tinning Ltd.	Radiators, fuel tanks, header tanks, cradles, fuel filler necks, hasp assy for Land Rovers.

Supplier	Goods supplied
Radio Distributors	Radio Supressors.
Rekitt and Colman Ltd.	Target Aerosol cans, Jik, min cream, white cobra wax polish, Harpic, Windowlene, Brasso.
Rescu (Pvt) Ltd.	Seat hooks, seat retaining wires, head restraint frames.
Rubber and Allied Products	Elbows, reducers, hoses, Sorbo rubber.
Robray (Pvt) Ltd.	Sets of seat foams.
Reunert and Lenz Ltd.	Copper rods, long travel drive unit disc brake for overhead crane.
RNR Fibreglass Ltd	Fan cowls
Saltrama Plastex Ltd	Plastic seat covers
Steel Centre Zimbabwe	M.S. rod Colis, BMS round, flat bar, mild steel sheets, MS angle
J W Searcy Ltd.	Drill chucks, Jacobs chuck keys, tap wrenches, die nuts and tools
Shell Chemicals Ltd.	MEK Xylol, special solvent
Shell Oil Company	Benzine, Donascoil, oils, amber petrolatum, power paraffin, petrol and diesel
Simms Electrical Ltd	Fuses, plugs, couplings and terminals
Stansfield and Ratcliffe	Double snap connectors, fuel content switches for Land Rover.
Steelforce Ltd.	BMS round bars, straight wire 4,5mm and mesh wire S156.
Stewarts and Lloyds Ltd.	Water pipe 25mm black, 16mm round bar, M.S. Channels, M.S. flat bars, pressure gauges 1/4" BSP - 0/100, furniture tubing, galvanised tube 25mm.
Sygnet Manufacturing	Rubber bushes for radiators, bump stoppers, steel swivel castors, cast iron swivel castors.
Safety Belt Industries	CH4 lap/diagonal belts for Land Rovers Inertia seat belts, CB lap only seat belts.
Sign and Display Ltd	6' long Chevrons

Supplier	Goods supplied
S K F Zimbabwe Ltd.	GACO - M15030, Hawkes 300, Repco oil seals.
Spanguard (Pvt) Ltd	8' x 4' x 10 gauge expanded metal.
Stirling Auto Distributors	TA34B 3" amber reflectors - Prismatic - plastic flange
Springquip (Pvt) Ltd	Accelerator return springs
Trinidad Asphalt Ltd	Sets of seat cushions for various models, head restraint foam pads and arm rest foam pads.
Tedder Green Ltd.	Tools, die nuts, BSP taps, Onark drive-it studs and charges. Trinepon 2014.
Thames Ltd.	Tools and sockets, S.D.
Three 'D' Engineering	Padlocks
Tinto Industries	Spring shackles, spring hanger brackets
Tropicool Venetian Blind Company	Venetian blind cords, polyester string type tapes
Tube and Pipe Industries	Round tubing
United Spring & LEAF Forging	Springs for various models, bushes and wrecking bars, "U" bolts.
Umtali Farmers Co-op	Tobacco paper 54" wide, multi-Benex, fencing wire 8 gauge.
Vitafoam Limited	VitaFoam sheets, sets of seat cushion foams, foam stiffner front cushions for L/Rover squab crash pads (Virecon) and packing pieces, dust sealing pads, various.
Vivian and Watson Ltd.	Hardware and tools, various (eg sockets, screwdrivers - Phillips, Chandelier chain, spanners, Circlip pliers, Yankee screwdrivers Bull pane hammers, hacksaws, trimming knives etc.)
Wattle Company	30kg. bags of charcoal.
E Waxman (Pvt) Ltd.	Bifurcated rivets, curved needles, No. 24 eyelets.

Supplier	Goods supplied
David Whithead Ltd.	Jungle green canvas, calico cloth, scoured lint-free cloth.
Willard Batteries	SM11 batteries, 5SH - 12 vold H/DD batteries for L/Rovers. 14/70 for Hino c/w special clamps for swift specification.
Weldwell (Pvt) Ltd.	UTP - 8 electrodes
William, Smith & Gourock	White cotton twine, 1" Mill Webbing, Mills Webbing buckles and No.20 eyelets
Zambezi Coachworks	Double glazing channels
O Connoly and Co. (Pvt) Ltd.	Tensioner blocks, trailer spring brackets, spring hanger brackets, planetary gear carriers, brake discs, camshaft dogs, brake drums (heavy vehicles 13 types), radiator fans, spline flanges, selector forks, hubs (Heavy vehicles), camshaft levers, rear wheel lugs, thrust pads (14 types), brake plates and rings, radio rods (fixed and adjustable), bracket rockers, spring seats, spring hanger, shackles, brake shoes, stub ball yokes, flange yokes, steering knuckles, hub front axles, front axle support boxes, stay road ball sockets, stay rod caps, 16" rims.
Payen Zimbabwe (Pvt) Ltd.	Full range of gaskets - includes cylinder head gaskets; full sets and decoke sets; commercial vehicle mirror heads; wide range pumps; grease guns; injector washers; battery cables; exhaust clamps; valve grinding paste; car trailer electrical switch boxes and consoles.
Load Engineering (Pvt) Ltd.	Axles; suspensions; hydraulic units.

RESTRICTED ITEMS UNDER LEGAL NOTICES No.22 (1980), 124 (1986) 245 (1991) FOR MOTOR VEHICLE INDUSTRY

K E N Y A

1980	*1986*	*1991*
•*Oils* •*Greases* •*Fuels* •*Hydraulic Fluid* •*Sealers* •*Adhesives* •*Batteries* •*Tyres* •*Tubes* •*Paint* •*Toughened Flat Glass* •*Canvas hoods, covers and screens* •*Soft trim and upholstery* •*Sound deadening material* •*Radiators* •*Exhaust* •*Leaf Springs* •*Spare Wheel Carriers* •*Seat Frames* •*Wiring harness* •*Brake Linings*	•*U Bolt nuts and U Bolts* •*Disc brake pads* •*Hydraulic dampers/shock absorbers* •*Pre-mixed metal, pre-treatment chemicals* •*Windscreen, side and rear glass* •*Radio and Cassette players* •*Hydraulic Jacks* •*Spark plugs*	•*Disc pad backing plate* •*Battery cables* •*Scissor jacks* •*Speedometer cables* •*Engine Air Filters* •*Shackle pins for leaf springs* •*Safety belts* •*Tool kits*

TOTAL EXPORTS OF AUTOMOTIVE ELECTR EQUIP TO THE REST OF THE WORLD BY PTA
(VALUES IN US$)

COUNTRIES/YEARS	1985	1986	1987	1988	1989
ANGOLA	0	1,000	4,000	1,000	5,000
DJIBOUTI	0	0	7,000	0	0
ETHIOPIA	221,000	77,000	41,000	12,000	20,000
KENYA	45,000	176,000	16,000	100,000	13,000
MADAGASCAR	0	0	8,000	1,000	0
MAURITIUS	124,000	0	2,000	0	35,000
MALAWI	0	5,000	29,000	7,000	5,000
MOZAMBIQUE	36,000	4,000	4,000	0	0
SEYCHELLES	92,000	6,000	0	15,000	2,000
SOMALIA	0	0	8,000	22,000	0
TANZANIA	0	15,000	0	0	0
UGANDA	0	0	0	0	1,000
ZAMBIA	0	6,000	38,000	0	0
ZIMBABWE	9,000	13,000	41,000	24,000	39,000
TOTAL PTA	527,000	304,000	190,000	192,000	120,000

TOTAL IMPORTS OF AUTOMOTIVE ELECTR EQUIP FROM THE REST OF THE WORLD BY PTA
(VALUES IN US$)

COUNTRIES/YEARS	1985	1986	1987	1988	1989
ANGOLA	1,436,000	1,722,000	1,006,000	912,000	765,000
BURUNDI	33,000	78,000	112,000	244,000	74,000
DJIBOUTI	108,000	112,000	102,000	71,000	52,000
ETHIOPIA	686,000	987,000	1,033,000	797,000	749,000
KENYA	1,933,000	1,770,000	1,844,000	2,163,000	2,299,000
COMOROS	14,000	35,000	25,000	63,000	39,000
MADAGASCAR	222,000	334,000	293,000	468,000	438,000
MAURITIUS	296,000	233,000	361,000	341,000	392,000
MALAWI	230,000	229,000	225,000	184,000	309,000
MOZAMBIQUE	272,000	270,000	576,000	510,000	973,000
RWANDA	131,000	195,000	325,000	166,000	204,000
SEYCHELLES	56,000	25,000	37,000	77,000	83,000
SOMALIA	99,000	141,000	261,000	256,000	55,000
TANZANIA	1,029,000	1,062,000	606,000	557,000	714,000
UGANDA	114,000	81,000	254,000	231,000	237,000
ZAMBIA	355,000	325,000	339,000	1,168,000	1,922,000
ZIMBABWE	483,000	595,000	525,000	508,000	805,000
TOTAL PTA	7,557,000	8,194,000	7,925,000	8,818,000	10,110,000

SOURCE : PTA SECRETARIAT

Over 70 years in the production of metal components

Teksid - Fiat's metalworking operation - handles the manufacture of cast-iron, aluminium and other light-alloy castings, and steel forgings.
Teksid: one of Europe's leading firms in terms of size, modern installations and advanced manufacturing technologies.
Two significant statistics: a workforce of over 11,000 persons, and a turnover of more than 1,000 million dollars in 1990.
Teksid: the sum of 70 years' experience in the manufacture of metal components on behalf of top-flight automarkers.

Wide experience as a supplier to customers throughout the world

Teksid: a wealth of prestigious international customers composed of American and European manufacturer of automobiles, commercial vehicles, tractors, earthmovers, diesel engines, mechanical components, aircraft, helicopters, etc.

An organization composed of three divisions

Iron Foundry, for the manufacture of grey and nodular iron castings.

Aluminium Foundry, for the manufacture of permanent-mould and pressure-die aluminium castings.

Steel Components, for the manufacture of hot forged, warm and cold formed steel parts, and various mechanical components.

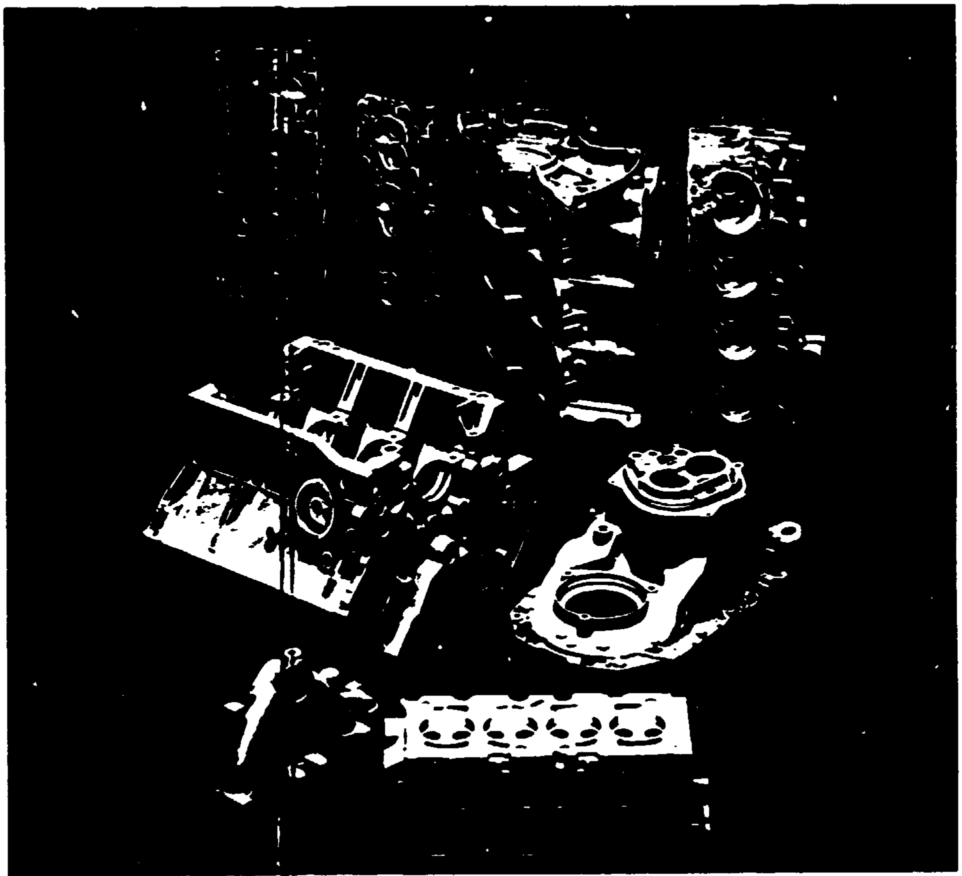
Iron Foundry

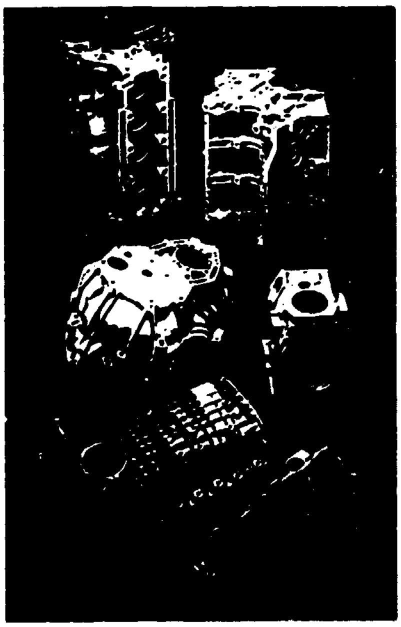
IRON CASTINGS

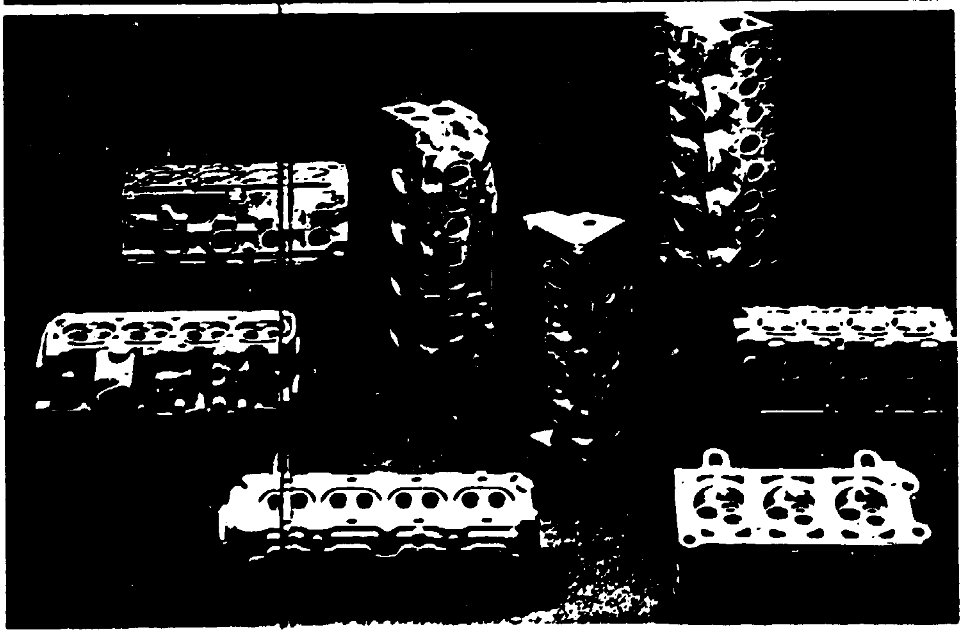
In nodular iron: crankshafts, con rods, ca

In grey iron: engine blocks, diesel engine
the refrigeration industry and various other

Aluminium Foundry







ALUMINIUM CASTINGS

In permanent moulds: cylinder heads, intake manifolds, brake calipers, etc.

In pressure die: engine blocks, differential and transmission housings, and gearboxes.

Steel Components

TEKSID S.p.A.

Registered Office and Head Office - Via Pianezza, 123
10151 TORINO (ITALY) - Tel. (011) 7174.1 - Telex 224042 TEKSID

IRON FOUNDRY
Registered Office and Carmagnola Factory
Via G. Agnelli, 60
10022 Carmagnola (Torino)
Tel. (011) 9717.1
Telex 215484 TEKFON

Crescentino Factory
Strada del Ghiaro, 24/26
13044 Crescentino (Vercelli)
Tel. (0161) 845.1
Telex 215359 CREFON

ALUMINIUM FOUNDRY
Registered Office and Carmagnola Factory
Via G. Agnelli, 60
10022 Carmagnola (Torino)
Tel. (011) 9717.1
Telex 214327 TEKALL

Turin Factory
Via Paolo Veronese, 330/30
10148 Torino
Tel. (011) 7174.1
Telex 221546 RIALTO

STEEL COMPONENTS
Registered Office and Turin Factory
Via Plava, 74
10135 Torino
Tel. (011) 3331.1
Telex 221665 TEKFOR

Avigliana Factory
Corso Torino, 2
10051 Avigliana (Torino)
Tel. (011) 9317.1
Telex 210262 TEKTRA

Teksid Group Companies

Getti Speciali S.p.A.
Via Rondò Bernardi, 15
10040 Borgaretto (Torino)
Tel. (011) 7174.1
Fax (011) 7174.350

Fmb Produtos Metalurgicos L.t.d.a.
BR 381 km 431
Bairro Maria Flàvia
32660 BETIM - MG - Brazil
Tel. (31) 5298111
Telex 311444 FMBM
Fax (31) 5298555

Taf Inc.
1635, Old Columbia Road
Box 319
Dickson (TN) 37055 (USA)
Tel. (615) 4468110
Fax (615) 4462460

Commercial Organization Abroad

FRANCE
Teksid S.p.A. Paris Office
71, Boulevard National
92255 La Garenne Colombes
Tel. (1) 47864285/6/7/8
Telex 613231 F

GERMANY
Teksid Repräsentanz Deutschland
Westendstraße 60
6000 Frankfurt am Main
Tel. (069) 75480
Telex 4170965 fiat d

UNITED KINGDOM
Teksid Liaison Office
5th floor
Berkeley Square House
Berkeley Square
London W1X 6AL
Tel. (01) 4080477
Telex 21898 fialo g

SPAIN
Componentes Auto s.a.
Avenida Sarria, 137-139
Escl. B. Entlo, 2
08017 Barcelona
Tel. (3) 2043700/6300061
Telex 97122 TEKC E

USA
Teksid Inc. Registered Office
250 Sylvan Avenue
Englewood Cliffs
New Jersey, N.J. 07632
Tel. (201) 816.2600
Fax (201) 816.2713

Dearborn Office
290 Town Center Drive
Suite 311
Dearborn, MI 48126
Tel. (313) 3362400
Telex 275225
Fax (313) 3362406

IVECO FOREIGN COLLABORATIONS

COUNTRY/PARTNER	VEHICLES/COMPONENTS PRODUCED
ARGENTINA	
. IVECO Argentina	Medium/Heavy/
. Mecamotor	Engines 8060
AUSTRALIA	
. I.T.A.L.	Heavy
CHINA	
. Nanjing Motor Corporation	S range/ Engines 8140
EGYPT	
. NASCO	Medium/Heavy/ Buses
ETHIOPIA	
. AMCE J.V.	Medium/Heavy/ Buses
INDIA	
. Ashok Leyland	Cargo vehicles Driving axles Engines 8000/8460
IRAN	
. KHODROWSAZAN	Buses
. Zamyad	Heavy
KENYA	
. Motor Mart Group	Medium/Heavy/ Buses
KOREA	
. HALLA Engineering & Heavy Industries Ltd.	Heavy
LIBYA	
. Libyan Trucks & Bus Co.	Light/Medium/ Heavy/Buses

COUNTRY/PARTNER	VEHICLES/COMPONENTS PRODUCED
NIGERIA	
. National Truck Manufacturers	Light/Medium/ Buses
FaKISTAN	
. BELA Engineers	Agricultural engines 8000
RUSSIA	
. URALAZ	Heavy
SOUTH AFRICA	
. Truckmakers	Medium/ Heavy
. PUTCO	AP 160
TANZANIA	
. Incar	Medium
TUNISIA	
. STIA	Light/Buses
TURKEY	
. Otoyol	Light/ Heavy/Buses
URUGUAY	
. Camiones Diesel	Light
VENEZUELA	
. FIAV	Medium/Heavy/ Buses
YUGOSLAVIA	
. Z.K.	Light
. T.I.V.	Heavy/Bus
ZAIRE	
. IVECO Zaire	Light/Medium/ Heavy
ZIMBABWE	
. Zimbabwe Automotive Industries	Light/Medium/ Heavy