DEALER LIST

DEALER NAME	TEL NO.	FAX NO.
NISSAN DIESEL EASTERN CAPE		
Automall Nissan	043-727 1040	043-701 2703
Datnis King William's Town	043-642 1527	043-643 3970
Kudu Motors	049-892 2126	049-892 5303
Queenstown Nissan	045-839 2127	045-839 2366
Super Trucks	041-486 2552	041-486 2240
Alberts Nissan Diesel	051-633 2049	051-633 2115
NISSAN DIESEL GAUTENG		
I C Nissan Benoni	011-845 1640	011-845 2320
Toits Motor Group trading as Menlyn Nissan	012-470 4000	012-470 4051
Magnis Trucks Pretoria	012-327 2860	012-327 2840
Magnis Trucks Samrand	012-657 9000	012-327 2840
McCarthy Commercial Vehicles	011-918 1802	011-918 1817
Northwest Auto	011-953 1175	011-660 4540
NISSAN DIESEL KWAZULU NATAL		
CMH / Pinetown	031-700 5410	031-700 3472
CMH Pietermaritzburg	033-897 7400	033-897 7444
Estcourt Farmers Equipment	036-352 3078	036-352 3260
Fednissan Newcastle	034-312 5801	034-312 5923
Intercity Nissan Empangeni	035-787 1471	035-787 1397
Thompson Motors	039-682 1070	039-682 1087
Vryheid Nissan	034-983 2373	034-983 2377
F & R Phakisa Operations	036-633 3602	036-633 3600
NISSAN DIESEL LIMPOPO		
BB Motors, Tzaneen	015-307 4950	015-307 1676
BB Truck & Tractor Services	015-293 2694	015-293 1674
Bohlabela Nissan	015-781 7577	015-781 7578
Limpopo Nissan	014-736 3603	014-736 3213
NISSAN DIESEL MPUMALANGA		
Eastvaal Nissan Bethal	017-647 1098	017-647 1098
Ermelo Truck & Tractor Centre	017-811-5885/6/7	017-811 5615
Middelburg Nissan	013-243 2268	013-282 4406
Rob's Nissan	013-932 6430	013-932 6430
Produkta Nissan	013-752 4101	013-753 7346
Witbank Auto	013-656 6321	013-656 6329
NISSAN DIESEL NORTHERN CAPE		
De Aar Motors	053-631 3792	053-631 1104
Oranje Nissan	054-338 8000	054-338 8033
Trek Nissan	027-712 3111	027-712 3758

DEALER NAME	TEL NO.	FAX NO.
NISSAN DIESEL NORTH WEST		
Toits Motor Group Brits	012-252 3313	012-252 5300
GBS Nissan Diesel	018-464 2336	018-462 7634
John du Toit Motors	018-632 4085	018-632 2672
Lionel Motors	014-592 1328	014-597 1273
Noord-Wes Nissan	018-642 2015	018-642 2188
RA Motors	018-596 1177	018-596 2254
Stellaland Nissan	053-927 2371	053-927 2208
NISSAN DIESEL ORANGE FREE STATE		
Kalil Nissan	051-430 3721	051-447 5363
Muizen Motors	057-355 7340	057-355 7219
Sasko Nissan Diesel	058-307 4522	058-303 8109
NISSAN DIESEL WESTERN CAPE		
A.A.D. Truck & Bus	021-535 1820	021-535 1910
J.B.'S Nissan	022-482 1124	022-487 1183
N.L.K. Nissan	027-213 1086	027-213 2863
Short's Nissan	044-878 0840	044-878 0840
Schus Nissan-Kuilsrivier	021-903 0500	021-903 0530
Moutons Garage	023-347 2578	023-342 4829
NISSAN DIESEL BOTSWANA		
Broadhurst Motors	09267-391 2579	09267-391 2579
Francistown Nissan	09267-241 2380	09267-241 2828
NISSAN DIESEL LESOTHO		
Lesotho Nissan	09266-2231 6608	09266-2231 0098
NISSAN DIESEL SWAZILAND		
Motruck	09268-518 7096	09268-518 4323
NISSAN DIESEL NAMIBIA		
Pupkewitz Trucks	0926461-217595	0926461-217599
NISSAN DIESEL EXPORTS		
ABC - Mauritius	(230) 242 1168	(230) 242 1193
CFAO - Malawi Limited	09265-1-677443	09265-1-677478
CFAO - Zambia	09260-243112-4	092601-243125
Duly Trucks - Zimbabwe	092634-703 441	092634-755236
Motorcare - Mozambique	092581-312931	092581-312930
T D A - Angola	092442-390862	092442-391595

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UD NISSAN DIESEL
means business

Trucking insights
Transport productivity in perspective

September 2007

Dear valued customer,

While most transport managers and truck operators have been busy trying to keep up with meeting the demand for more and larger on time deliveries they may not have had the time to absorb or perhaps be fully aware of how much truck operating costs have increased this year.

According to published data, when measured in cents per kilometre (CPK), transport costs for average longhaul primary distribution operations have leapt by almost 20 per cent year-on-year to August 2006. The main cost drivers have been fuel, vehicle maintenance, tyres, driver s wages and more recently, interest rates. The weaker Rand and creeping inflation heralds an uptick in vehicle and equipment prices, the first in almost three years.

This scenario provides us with a compelling motivation to revisit the question of fleet efficiency and explore potential profit improvement possibilities. Lets begin with the trucks you now have in service. In terms of specifications how do you rate the potential to improve productivity measured in ton/kilometres per hour (Ton/Km-hr) or any other measure that better suits your business. Litres or cubes per Kilometre or hours are examples you may prefer?

A truck s ability to produce optimum Ton/Km-hr resides with how well it can support a better than average load and move it at an acceptable average speed provided of course, it is correctly and intelligently driven.

The basic data you can derive from actual daily payloads and recorded trip times (must include total kilometres and total driving time) and the fuel consumed in litres provides a handy measure of fuel-efficiency, i e — Ton/Km per litre. This is a more useful measure of fuel-efficiency than the meaningless and commonly used terms Km/Litre or Litre/100 Km. Neither tell you anything about the operating conditions such as: was the truck loaded or empty? How long did the trip take?

A simple calculation based on actual daily operating data enables fleet efficiency or the efficiency of a particular vehicle to be measured and compared with the maximum potential productivity of the fleet or of individual vehicles in the fleet. This is so regardless of how productivity is expressed. The concept is best illustrated with a hypothetical example.

EXAMPLE 1:

Assume a truck completes a 250 km trip in 4hours 30 minutes (4,5 hrs). The vehicle can take a legal payload of 10 tons, however, it s load for this trip is 9 tons. Fuel consumed for the journey is 105 litres.

Average Speed: 250 km/ 4.5 hours = 55.5 km/h or

69% of the 80km/h highway speed limit

Productivity: 9 ton payload x 55.5km/h = 499.5 Ton/Km-hr

Average Fuel Usage Per Hr: 105 litres/ 4.5hr = 23,3 litres/hr

Fuel Used expressed in Ton/km-litre: 499.5/ 23.3 litres/hr = 21.43 Ton/Km-litre

Assume that after review of the operation a few improvements can be achieved. The 250 kilometre trip is now completed in 4 hours and the full payload of 10 tons is carried. The fuel consumed remains the same at 105 litres:

Average Speed: 240 km/ 4 hours = 62,5 Km/hr or 78% of the speed limit

Productivity: 10 ton payload x 62.5 km/h = 625 Ton/Km-hr

Average Fuel Used Per Hr: 105 litres/ 4hr = 26.5 litres/hr

Fuel Used in Ton/Km-litre: 625/ 26.5 litre/hr = 23.58 Ton/Km-litre

Productivity Improvements

Trip time	12.5%
Average Speed	12.6%
Payload	10.0%
Productivity	25.0%
Fuel (litres/hr)	(13.7%)
Fuel (Ton/Km-litre)	10.0%

The example shows how modest improvements in payload and average speed result in significant improvements in productivity and fuel-efficiency.

productivity improvement factors

Factors that lead to productivity and profit improvements are found in a number of key areas. These include:

Availability & Utilisation - from the time you take delivery of a vehicle you are committed to pay the fixed costs whether you use it or not. Theoretically speaking a vehicle is able to work 24 hours a day 365 days a year. In practice, however vehicles work approximately 250 to 312 days a year depending on the operation. Translated into working hours this could be between 2 000 and 4 000 hours a year. If we use the assumptions from the example above the hypothetical 10-ton payload vehicle could produce up to 2,5 million ton/km a year. In practice well-managed longhaul vehicles rarely take up more than 40 to 50% of the achievable productivity. In the case of typical secondary distribution vehicles, actual productivity is rarely more than 20% of the achievable productivity. A revenue earning truck is a prolific producer of ton/km-hr. If they are not used, for whatever reason, they are wasted and can never to be retrieved. For this reason, managers that do not understand the fundamentals of efficient trucking, think that trucks are expensive to operate.

Payload — Apart from making sure the optimum payload is carried. Whenever possible take steps to maximise the payload to gross mass ratio. The payload factor should always be greater than 50 per cent of the gross vehicle or gross combination mass. Strive to keep the unladen mass of your vehicles and trailers as low as is practical, safe and durable. In many instance the current and coming generation of vehicles and trailers offer better tare mass. When you think in terms of Ton/Kms you will appreciate that large vehicles are more economical than smaller ones. When considering vehicles for a particular task, do the Ton/Km-hr calculation to establish how many vehicles you really need to do the job economically and profitably. Achieving more transport with fewer trucks is an elegant solution to containing transport costs.

Average Speed — Correctly spec d trucks should be capable of hauling a full load at an acceptable average speed. The hypothetical example demonstrates how a small improvement in average speed contributes significantly to enhancing the ton/km-hr performance. In combination, payload and average speed usually add up to economical transport. This is so when the average kW power needed to achieve it does not exceed more than 60% of the vehicle manufacturer s maximum power rating. An acceptable average speed lies between 75% and 80% of the highway speed limit obviously when it is safe and sensible to do so. Under urban traffic conditions, 70% to 75% of the 60km/h speed limit is more appropriate. There is a limit to increasing the average speed beyond

which it begins to add cost to your operation.

Regular Updates —Knowledge and understanding of these basic concepts enables operators to establish and implement productivity benchmarks that can be regularly updated in the light of ongoing operations. The technique gives early warning of uneconomical tasks, routes, schedules, vehicle availability and performance.

The Ton/Km-hr concept can be profitably applied in projecting the fuel required to undertake specific transport tasks. Example 2 illustrates the point

EXAMPLE 2:

Assume the job to be done requires transporting 1 000 ton/kms with a 10-ton payload vehicle. Using the some of the data from example 1 we can calculate the fuel required to complete the task:

Total Ton/Km to transport	- 1 000 Ton/Km
Fuel in Ton/Km-litre	- 23.58 Ton/Km-litre
Fuel required	- 1 000/23.58 = 424 litres

If the vehicle carries a 9-ton payload the fuel required would be 467 litres (1000/21.43), an increase of 10 per cent in fuel usage.

The growing pressure on transport rates and the prospect of the fuel price remaining high for some time, there is every reason to seek ways to improve vehicle productivity. Give consideration to conducting a comprehensive audit of your transport operations to identify any potential you may have for profit improvements. Policies and procedures tend to be taken for granted and we lose the fine edge needed in today s tough operating conditions to achieve the lowest life cycle operating costs.

Review and assess you transport objectives, this especially if you have not done this for the past three years. You will be pleasantly surprised to find there are opportunities waiting for you to implement with real potential to improve your bottom line. Good luck and drop us a line to share your success with others in the business of trucking trying to widen the gap between current transport rates and rising expenses.

Sincerely,

Frans Cloete
Executive Vice President: Operations

For more information, do visit our website on: www.nissandiesel.co.za