Figure 11.5c. COSTS OF POOR QUALITY AND PRODUCTIVITY: The Automotive Industry

EM9212: Toronto Star, October 16, 1992, page D1

GM Oshawa gets low marks

By Tony Van Alphen
TORONTO STAR

General Motors assembly plants in Oshawa are near the bottom of the parent company's list in productivity in North America, says a study by a prominent industry consulting firm.

The two GM car assembly operations also rank among the lowest against Canadian competitors in measuring how many worker days it takes to build a car, says Harbour and Associates Inc. of Troy, Mich.

On the other hand, Harbour noted in its report on industry competitiveness that Ford's Oakville plant is the fourth-most efficient car assembly operation among the North American-based auto makers while Chrysler's Bramalea factory ranked fifth.

"Chrysler and Ford operations in Canada are among the top in their respective companies", Jim Harbour, founder of the consulting firm, said in an interview yesterday. "GM is close to the bottom".

But Harbour, a retired director of corporate manufacturing engineering at Chrysler, has released specific figures for only a few of the 70 assembly plants in North America and would not say exactly how low the GM Canada plants ranked among them.

His firm's study revealed that GM's Number 1 Oshawa assembly plant needs 3.76 worker days to produce the Lumina while the Number 2 operation, which makes the Lumina and Regal models, needs 4.43 workers. The truck plant, which manufactures pickups, needs only 3.1 worker days.

GM is closing 21 plants around the world by 1995 and at least one of five operations producing mid-sized cars is on the hit list. That has put the future of the two Oshawa plants in question, but GM has assured production into 1994.

Harbour's statistics – which rated 58 Big Three plants and 12 operations owned by offshore companies – are important in calculating productivity but are only a partial yardstick. The best way to measure it is by the total cost of production, said GM spokesperson Stew Low.

But GM refuses to reveal its production costs, claiming the information would aid its its competitors.

Although the GM plants in Canada ranked low in the company's over-all list, the Number 1 and truck operations have improved substantially during the past two years, the study notes.

The Number 1 plant improved 23 per cent while the truck operation increased productivity by 22 per cent.

Harbour's study showed Ford's Oakville plant needs only 2.80 worker days to produce the Tempo and Topaz while Chrysler uses 3.03 employees per day to make the Concorde, Intrepid and Vision models at its Bramalea operation.

It revealed that Ford's St. Thomas plant needs 3.39 worker days to make the Crown Victoria. Chrysler's mini-van plant in Windsor uses 3.75 worker days per vehicle, the study says.

Measuring productivity

Since 1979, Ford has been the leader in productivity gains among Detroit automakers. Chrysler is catching up fast, but GM is plodding along.

Best North American owned car plants

Company	Location	Product	Wrkers per Unit*
Ford	Kansas City, Mo.	Tempo/Topaz	2.37
Ford	Atlanta, Ga.	Taurus/Sable	2.49
Ford	Chicago, Ill.	Taurus/Sable	2.49
Ford	Oakville, Ont.	Tempo/Topaz	2.80
Ford	Wayne, Mich.	Escort	3.03

*Excludes overtime and absenteeism

Closing the quality gap, 1980-1992

Company	Defects per 100 vehicles 1980	Problems per 100 vehicles 1989	Problems per 100 vehicles 1992
Japanese	205	119	117
Ford	670	143	125
GM	740	162	133
Chrysler	810	178	142
Europeans	270	204	161

SOURCE: Detroit Free Press; Automakers; J.D. Power and Associates. Based on customer feedback after 90 days of ownership.

Knight-Ridder Tribune/HANK SZERLAG

In addition to illustrating the theme of the costs of poor quality and productivity, the article EM9212 reprinted above raises two matters of more general interest in the context of these Course Materials:

∗ the *measurement* of productivity;
∗ the *direct relationship* between productivity and quality.

These matters are taken up in the questions below.

1 What index of productivity is used in the article EM9212 reprinted above?
- Comment briefly on this index from the perspective of a *measuring* process.

2 What index of productivity does General Motors suggest as a *better* index?
- Briefly compare and contrast this index with the one in Question 1 from the perspective of a measuring process.

3 What evidence is provided in the article EM9212 and its accompanying table that higher quality is associated with *higher* productivity? Explain briefly.
- What *contrary* evidence is provided Explain briefly.

4 Comment briefly on on the use of *Defects per 100 vehicles* and *Problems per 100 vehicles* as measures of *quality.*

(*continued overleaf*)

EM9106 The Kitchener-Waterloo Record, March 1, 1991, page D2

GM makes Saturn recall a happy event

Record news services

DETROIT – Saturn, the newest car division of General Motors, announced its first recall recently and seemed determined to make the occasion a cheerful one.

The company, based in Spring Hill, Tenn., said that it was notifying owners of 1,210 Saturns – roughly 15 per cent of the cars it has built – of a possible problem with the front seat recliner mechanisms.

The seatbacks might slip a few notches on their own, "so of course you'll want to get this repaired right away," Saturn said in letters it sent by overnight mail this week to affected owners.

To make sure there is no confusion, Saturn notified all the other buyers of its car by overnight mail that their vehicles are not affected by the recall.

And to be extra forthright, Saturn representatives telephoned reporters in Los Angeles, Detroit and other cities to alert them to the recall, in addition to issuing the usual news release.

Dealers, meanwhile, were gearing up to visit owners of the affected cars and offer to fix the problem at their homes, at work, or wherever they would like.

The response of Saturn, which has had production start-up problems but received generally high marks for its cars, recalls the full-court press by Toyota's luxury Lexus division when it faced a similar early recall.

"Saturn has an opportunity to really turn this into a positive thing," said Chris Cedergren, analyst at J.D. Power & Associates in Agoura Hills, Calif. "When they go to such lengths, a lot of buyers will actually be somewhat flattered at all the attention they're getting for a $10,000 U.S. car."

Saturn officials said that they knew of no accidents or injuries resulting from the problem. Mike Smith, general manager of Saturn of Santa Ana, Calif., said that none of his customers had even complained of the problem. He learned of it when Saturn officials divulged the repair program, he said.

"Don't call it a recall," he said. "We're enhancing the seat mechanisms."

EM9811: The Globe and Mail, May 16, 1998, pages A1, A7

Recall bugs the Beetle

Hot new Volkswagen may get hot wires too

BY GREG KEENAN
Auto Industry Reporter

The new Bug has a bug.

The reborn Volkswagen Beetle, which has taken the North American car-buying public by storm since it arrived back on dealers' lots in March, was recalled yesterday because some wires in the engine compartment might chafe and cause a fire.

Volkswagen of America Inc. said all 1,600 of the new Beetles on the road in Canada and 8,500 sold in the United States since March are being recalled voluntarily to have the problem fixed. The wires and the battery tray that the wires might rub on will be replaced free of charge.

"From a marketing standpoint, you don' want this kind of stuff going on, said Chris Travell, director of automotive research for the consulting firm Maritz Canada Inc. "They've done such a masterful job at launching the product."

The reall is the first speed bump the new Beetle has hit since it went on sale amid a barrage of media hype earlier this year.

Dealers have been sold out and are taking orders for delivery in six months. Drivers of the retro Bug have been swarmed on streets across North America and some people who have bought Beetles are reselling them to others at a higher price because of the high demand.

Volkswagen acknowledged this secondary market yesterday in the news release announcing the recall, urging new Beetle owners who have purchased their cars from non-Volkswagen dealerships to phone a toll-free number or contact a nearby Volkswagen dealer.

The new Beetle, which starts at a little less than $20,000 in Canada, was generating the kind of publicity that makes auto makers' sales executives drool – until yesterday.

The reall came just days after the U.S. Insurance Institute for Highway Safety gave the car its highest crashtest rating.

Mr. Travell said Volkswagen executives are probably studying Daimler-Benz AG and how its Mercedes-Benz unit responded to a much more serious crisis last year after its new small cars rolled over when Swedish journalists put them through tests designed to avoid elk or moose.

Mercedes delayed the introduction of the cars and installed a new stabilization system and has avoided major damage.

Industry analysts said Volkswagen will suffer little damage – if any – because car buyers have become accustomed to recalls, even for new vehicles.

"It will not cause even a ripple," 'said Chris Cedergren, managing director of Nextrend Inc., an automotive consulting firm based in Thousand Oaks, Calif.

"I'll even bet everything I've got that sales will continue to grow on this thing" Mr. Cedergren said.

Roger More, a professor of marketing at the University of Western Ontario, agreed. "It's embarrassing, for sure, but they'll fix it," Prof. More said yesterday. "The technological resources this company brings to bear are formidable." The fact the recall is prompt and voluntary should help, as well, he said.

The Beetle has been in hibernation since 1979, when Volkswagen stopped selling it in North America after an immensely successful run in the 1960s and 1970s.

It brought the car back in part to restore its name and image in North America, where Volkswagen sales dwindled in the 1980s and 1990s.

So far, the retro Bug has worked.

Clarkdale Motors Ltd. in Vancouver, for example, has already delivered 40 new Beetles and has a six-month order backlog, sales manager Rick Applegath said yesterday. He expects to sell about 200 by the end of the year.

The toll-free telephone numbers for information about the recall is 1-877-4-BEETLE.