

BACKGROUND

INFORMATION

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On February 17, 1983, Toyota Motor Corporation and General Motors Corporation signed an agreement in principle to produce a small automobile on the site of a permanently closed General Motors assembly facility located in Fremont, California. As outlined in the agreement, the project is a limited production arrangement for a period of 12 years with Toyota and General Motors each owning 50% of the company. Toyota has designed the manufacturing layout, coordinated acquisition and installation of equipment and has implemented its production system. General Motors will market vehicles produced and will have sole responsibility for pricing the vehicle.

The United Auto Workers and the joint venture entered into a letter of intent on September 21, 1983. According to the letter, the joint venture will recognize the UAW as the bargaining representative and will hire a majority of the workforce from the laid-off workers at the former Fremont GM facility. The UAW expressed its commitment to the venture and to establishing a positive labor-management relationship built on mutual trust.

Stamping plant construction began September 1983, and conversion of the assembly plant started November, 1983. The stamping plant, which will supply hoods, doors and other sheet metal parts, is about 180,000 square feet. The assembly plant is approximately 2.9 million square feet. Total square footage will be 3,080,000. More than \$400 million has been committed to reopening the plant.

New United Motor Manufacturing, Inc. is an equally owned company, established by Toyota and General Motors on February 21, 1984.

New United Motor, which owns 210 acres and all buildings that were formerly operated as a General Motors assembly plant, operates the plant in a manner similar to a typical Toyota assembly plant and is responsible for managing day-to-day operations.

On April 11, 1984, the Federal Trade Commission approved the limited joint venture between General Motors and Toyota. The FTC's investigation, in its own words, was one of the most intensive, thorough antitrust reviews ever undertaken.

New United Motor, as an independent company, has instituted policies and labor relations that differ from those that existed when General Motors operated the facility. Former agreements with GM will not apply. Team members selected are considered as newly-hired employees of New United Motor. Hiring for supervisors, skilled trades and team leaders began in May, 1984.

All candidates for employment are required to attend a pre-employment workshop that consists of three days of interviews, job simulations and discussions concerning New United Motor objectives and philosophies. Total employment for a two-shift operation is expected to reach approximately 2,500 by early 1986. Wages and benefits are at levels prevailing in the U.S. auto industry.

On December 4, 1984, New United Motor started production and the first car was completed on December 10. Chevrolet will market the Nova and has announced that the Nova will go on sale on June 13, 1985, in the middle part of the United States.

Initial annual production will be approximately 200,000 automobiles sold to General Motors.

Toyota and other Japanese manufacturers will supply approximately 50% of the value of the vehicle. Major components supplied by Japanese companies will include engine and transmission. U.S. companies will supply such items as air conditioner components, batteries, glass, headliners, paint and sealants.



Through New United Motor, General Motors is seeking to increase its long-term productive efficiency by learning the highly efficient Japanese manufacturing and management techniques.

Toyota will gain valuable operating experience in the United States through its dealings with American labor and parts suppliers. This experience will enhance its long-term viability as a producer in the United States.

Toyota and General Motors are not establishing any other cooperative relationship. They will remain competitors in the U.S. and throughout the world. General Motors dealers will market the New United Motor vehicle in direct competition with cars sold by Toyota in the U.S. Toyota is free to establish its own facility in the United States. General Motors remains free to develop, build or sell any other automobile that it chooses.

PRODUCTION SYSTEM

The foundation of the production system used at New United Motor is based on the philosophy and style established by Kiichiro Toyoda, founder of the Toyota Motor Corporation. Simply stated, the overall goals of New United Motor are to produce products with quality as high as those produced anywhere in the world, and at a reasonable and competitive cost. The basis of the production system is to produce consistently high quality cars while maintaining or reducing costs.

These goals are supported by management policies of mutual trust between labor and management and the development of mutually beneficial relationships with suppliers. New United Motor operates under the belief that the company's greatest asset is its people. Each team member must be able to take pride in his work. It is this sense of individual pride in workmanship and responsibility where keys of mutual trust and respect are developed.

Stable relationships with suppliers are also very important. These relationships help suppliers with production processes, delivery systems, and enables them to produce 100% quality products.

In order to support company policy, specific techniques are used in the production system to accomplish the goals. Two of the most important production techniques used at New United Motor are "just-intime" and "Jidoka", the quality principle.

"Just-in-time" means exactly what it says. It is the concept of producing or conveying only those units needed, just when they are needed, in just the amount needed, at all stages of production.

In implementing just-in-time, certain tools are used to make the process conform to the actual situation. Variation in demand, facility breakdowns, shortcomings of suppliers or employees are factors in the production system which must be dealt with. It is essential that unevenness and overburden in the process are avoided. Kanban is one of the tools to make the process conform to the actual situation.

The second technique is Jidoka. Jidoka refers to machines or the production line itself being able to stop automatically in abnormal conditions, such as when a machine breaks down or when defective items are produced.

Stopping the line in case of some abnormality is also applied to team members. Manned lines have a stop button or rope at each job site and every team member has the authority to stop the line at his own discretion. A speedy response then follows to discover the cause of the abnormality and to solve the problem.

Andon, an electrical sign board which lights up to show the current state of operations, allows for visual control and shows if production activities are proceeding normally or not. When the line is stopped, the exact location of the abnormality is displayed on the board.

The thread behind the fabric of the New United Motor Production System, policies and techniques is "consistency." Consistency in everything we do is important to achieving our goals. With consistency there is complete harmony within the production system, with the supplier network and most importantly, consistency in terms of stable employment levels throughout the company and supplier industry.