Jury Deliberation Civil Task

Please read **both sections** of this documents---the “Case Background” and the “Jury Instructions.” Remember, **you are not allowed to search on the Internet for any additional materials**.

Table of Contents

Case Background

Plaintiffs **Susan Chamberlan and Henry Fok (“Class Plaintiffs”)** filed a class action lawsuit in state court against **Ford Motor Company (“Ford”)** and several John Does, alleging that Ford knowingly manufactured, sold, and distributed automobiles containing a defective engine part, in violation of the California Consumers Legal Remedies Act (“CLRA”).

Plaintiffs bring this action on behalf of themselves and all similarly situated persons residing in California who purchased certain automobiles manufactured by Defendant. **Plaintiffs allege that, beginning in 1996, Defendant concealed material information about the intake manifolds in these cars, in violation of California law.**

An **intake manifold** performs multiple functions in a automobile engine. The intake manifold distributes air to each of the engine's cylinders. The intake manifold may also serve as part of the cooling system by channeling coolant across the engine, to and from the radiator. Historically, intake manifolds have been made of aluminum or other metal. Aluminum manifolds can be expected to last the life of the engine. Defendant had no problems with the performance of the water crossover portions that distribute coolant in its aluminum manifolds.

The manifolds at issue in this case are composed entirely of a non-metal nylon and glass composite material, i.e. plastic. Defendant's first such manifold was described by Ford employees as "the world's first V8 composite intake, and the first composite intake manifold to integrate a water crossover." The composite manifold was hailed as "the beginning of a major

technology shift toward the use of plastics & composites on core engine applications yielding substantial cost and weight savings."

Defendant began using non-metal composite manifolds, with a thickness of three millimeters, in the water crossover pieces in 1996 model year vehicles, which were first available for sale in June, 1995. Plaintiffs' earliest evidence that **Defendant was aware of problems with the manifolds is a November 16, 1995 report that a taxicab and a police car (heavily used cars referred to as "fleet" vehicles) were experiencing coolant leaks.** Ford employee Gerald Czadzeck assigned engineer Wolfgang Beatham to evaluate the results of a material analysis and bench test fatigue simulation. By June 6, 1996, Mr. Beatham estimated the part's **failure rate to be as high as nineteen per thousand at 50,000 miles and 270 per thousand at 120,000 miles.** This estimate did not reflect actual repair rates but rather was "something we expect to occur at higher mileage with the current production intake manifold." According to Mr. Czadzeck, Mr. Beatham's estimates reflected the "potential risk of not correcting the problem" as "extrapolated to the general public" rather than just high-end fleet users. Mr. Czadzeck characterized Mr. Beatham's estimates as "tremendously high failure rates." By August 28, 1997, internal Ford documents described both a "high number of wear out failures on the composite intake manifold on fleet customers and an increasing number of concerns on general population vehicles."

Between 1996 and 2000, Defendant tried to fix the problem by making several changes to the design of the non-metal manifolds. The first proposed solution was to add one millimeter of thickness to the water crossover parts; bench and finite element testing reportedly showed that this would reduce the projected warranty liability to zero at 120,000 miles. Id. at 3. This four millimeter "second generation" water crossover design was sold in 1997 model year vehicles. For 1998 model year vehicles' third generation manifold design, Defendant increased the thickness to five millimeters. According to Ford documents, the "4 and 5 mm iterations each demonstrated significant improvements in durability, but neither met [Defendant's] 95 percentile customer durability requirements." Composite Intake Action Plan & Lessons Learned, February 17, 1999, at 2. Defendant later changed the nylon material "slightly" and made some design revisions after the third generation.

In December, 1997, in order to address field failures with the three millimeter coolant crossover, **Defendant issued Owner Notification Programs (ONPs) to replace manifolds on Crown Victoria police vehicles, and extended warranties on Crown Victoria taxi, Thunderbird/Cougar and Mustang vehicles.** Similar ONPs were issued for four millimeter manifolds on fleet vehicles and some missed three millimeter vehicles. Id. These ONPs provided five millimeter replacements for car owners' three and four millimeter manifolds.

Defendant ultimately decided not to use all-plastic crossover designs in future vehicles. The Ford team had agreed,

> *[D]ue to the fact that our best evidence indicates that the failure is due to the accumulated effects of time, temperature and pressure in service; there is no reason to believe that the demand for service parts will increase linearly or flatten out. In the lower severity duty cycles the vehicles built at or around job # 1 are only now approaching the mileages where failures have occurred in the most severe fleet applications. In all probability the light duty applications will continue to fail at ever increasing rates ....*

According to an October 20, 2000 email, approximately 8,000 intake manifolds were being replaced each month on 1996 to 2000 model year 4.6L-2v passenger cars. **Defendant never issued ONPs to members of the Plaintiff class.**

Plaintiffs also provide evidence that class members were affected by Defendant's failure to alert them to problems with their manifolds. The named Plaintiffs and the other class members designated as witnesses all testify that t**hey did not expect their manifolds to fail, and some testify that they would not have bought the cars had they known of the increased risk of failure.**

Plaintiffs' expert Richard Greenspan also testified as to the high cost of replacing failed manifolds and the risk of engine failure. Mr. Greenspan also testified that a typical vehicle owner would not expect this part to fail.

In addition, Plaintiffs' experts have testified that all or most of class members' manifolds will eventually fail. According to Clemente Mesa, a mechanical engineer, **ninety percent of class members' manifolds will fail before the end of the useful life of the car, and a majority of those will fail before 100,000 miles**, regardless of which version of the intake manifold is used and regardless of whether the vehicle is used by retail or fleet customers. Similarly, Dr. Anand Kasbekar, an expert in forensic engineering, testified that "all versions" of the plastic manifolds were defective in that they would not last the life of the vehicle.

Jury Instructions

Design Defect

Susan Chamberlan and Henry Fok claim that the **plastic intake manifolds** contained a manufacturing defect. To establish this claim, **Chamberlan and Fok** must prove all of the following:

1. That **Ford Motor Company** manufactured/distributed/sold the **plastic intake manifolds**;
2. That the **plastic intake manifolds** did not perform as safely as an ordinary consumer would have expected it to perform when used or misused in an intended or reasonably foreseeable way;

3. That **Susan Chamberlan and Henry Fok** was harmed; and
4. That the **plastic intake manifolds**'s defect was a substantial factor in causing **Chamberlan and Fok**'s harm.

Directions for Use
To make a prima facie case, the plaintiff has the initial burden of producing evidence that he or she was injured while the product was being used in an intended or reasonably foreseeable manner. If this prima facie burden is met, the burden of proof shifts to the defendant to prove that the plaintiff's injury resulted from a misuse of the product. Product misuse is a complete defense to strict products liability if the defendant proves that an unforeseeable abuse or alteration of the product after it left the manufacturer's hands was the sole cause of the plaintiff's injury. Misuse or modification that was a substantial factor in, but not the sole cause of, plaintiff's harm may also be considered in determining the comparative fault of the plaintiff or of third persons.

Negligence/Duty of Reasonable Care

A [designer/manufacturer/supplier/installer/repairer] is negligent if [he/she/it] fails to use the amount of care in [designing/manufacturing/inspecting/installing/repairing] the product that a reasonably careful [designer/manufacturer/supplier/installer/repairer] would use in similar circumstances to avoid exposing others to a foreseeable risk of harm.

In deciding whether **Ford Motor Company** used reasonable care, you may consider, among other factors, the following:

1) The likelihood of harm;
2) The probable seriousness of such harm;
3) Whether **Ford Motor Company** knew or should have known of the
4) condition that created the risk of harm;
5) The difficulty of protecting against the risk of such harm; and
6) The extent of **Ford Motor Company**'s control over the condition
7) that created the risk of harm.

In determining whether **Ford Motor Company** used reasonable care, you should balance what **Ford Motor Company** knew or should have known about the likelihood and severity of potential harm from the product against the burden of taking safety measures to reduce or avoid the harm.

Directions for Use
Not all of these factors will apply to every case. Select those that are appropriate to the facts of the case. Under the doctrine of nondelegable duty, a property owner cannot escape liability for failure to maintain property in a safe condition by delegating the duty to an independent contractor.