

Safety Defect and Noncompliance Report for
PART 573 Defect and Noncompliance Report³

On October 6, 2009, Qualis Automotive LLC / Motorpro Corporation decided that (a defect which relates to motor vehicle safety)(a noncompliance with Federal Motor Vehicle Safety Standard No.) exits in items of motor vehicle equipment listed below, and is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 CFR Part 573 Defect and Noncompliance Reports.

Date this report was prepared: October 15, 2009

Furnish the manufacturer's identification code for this recall (if applicable):

N/A

1. Identify the full corporate name of the fabricating manufacturer/brand name/trademark owner of the recalled item of equipment. If the recalled item of equipment is imported, provide the name and mailing address of the designated agent as prescribed by 49 U.S.C. §30164.

Qualis Automotive LLC (Importer / Distributor and Designated Agent)
3150 Livernois Road, Suite 103
Troy, MI 48083

Identify the corporate official, by name and title, whom the agency should contact with respect to this recall.

Brian P. Schweinhagen
Quality Assurance Manager
Telephone Number: (859) 689-6109
Fax No.: (859) 689-7840

Name and Title of Person who prepared this report:

Brian P. Schweinhagen
Quality Assurance Manager

Signed:

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OFFICE OF DEFECTS
INVESTIGATION

⁴Each manufacturer must furnish a report, to the Associate Administrator for Safety Assurance, for each defect or noncompliance condition which relates to motor vehicle safety.

This guide was developed from 49 CFR Part 573, "Defect and Noncompliance Reports" and also outlines information currently requested. Any questions, please consult the complete Part 573 or contact Mr. Jon White at (202) 366-5226 or by FAX at (202) 366-7882.

I. Identify the Recalled Items of Equipment

2. Identify the Items of Equipment Involved in this Recall, *for each make and model or applicable item of equipment product line (provide illustrations or photographs as necessary to describe the item of equipment), provide:*

The parts in question are two separate aftermarket ball joints sold as four part numbers in the marketplace – D10945, D10946, G10945, and G10946. The parts fit the below OE applications but were never installed as Original Equipment. These are replacement parts only for the equivalent OE parts and are sold by Qualis Automotive to a limited customer base. These customers are described as aftermarket parts distributors and retailers.

D10945	Qualis P/N		Lower Control Arm
Make	Model	Year	Application
CHRYSLER	CIRRUS	00-95	ALL-ARM & JOINT LOWER LEFT SIDE
CHRYSLER	SEBRING CONVERTIBLE	03-96	ALL-ARM & JOINT LOWER LEFT SIDE
CHRYSLER	SEBRING	06-01	SEDAN-ARM & JOINT LOWER LEFT SIDE
DODGE	STRATUS	00-95	ALL-ARM & JOINT LOWER LEFT SIDE
DODGE	STRATUS	06-01	SEDAN-ARM & JOINT LOWER LEFT SIDE
PLYMOUTH	BREEZE	00-95	ALL-ARM & JOINT LOWER LEFT SIDE

D10946	Qualis P/N		Lower Control Arm
Make	Model	Year	Application
CHRYSLER	CIRRUS	00-95	ALL-ARM & JOINT LOWER RIGHT SIDE
CHRYSLER	SEBRING CONVERTIBLE	03-96	ALL-ARM & JOINT LOWER RIGHT SIDE
CHRYSLER	SEBRING	06-01	SEDAN-ARM & JOINT LOWER RIGHT SIDE
DODGE	STRATUS	00-95	ALL-ARM & JOINT LOWER RIGHT SIDE
DODGE	STRATUS	06-01	SEDAN-ARM & JOINT LOWER RIGHT SIDE
PLYMOUTH	BREEZE	00-95	ALL-ARM & JOINT LOWER RIGHT SIDE

Identify the approximate percentage of the production of all the recalled models manufactured by your company between the inclusive dates of manufacture provided above, that the recalled model population represents.

The parts in question are only from the vendor Motorpro that contain the issue. The first lot of the D10945 control arms, were received after 1/15/09 and are stamped with the following dates on the ball joints: 134308, 135708, 100109, 102709, 104109, 105509, 107609, 108909, and 110309. The first lot of the D10946 control arms, were received after 1/15/09 and are stamped with the following dates on the ball joints: 134308, 135708, 100109, 102709, 104109, 105509, 107609, 108909, 110309, 113209, and 116609. The stamped dates are comprised of the following: 1 is for the shift that the ball joints were manufactured; 343 is the Julian date that the ball joints were manufactured; and 08 is the year that the ball joints were manufactured (ex. 134308 was manufactured on the first shift of the 343rd day of 2008). All parts received with these dates are affected in this report.

The G10945 and G10946 are the same part as the D10945 and D10946 respectively, just labeled differently depending on the aftermarket customer.

II. Identifying the Recall Population

3. Furnish the total number of items of equipment recalled potentially containing the defect or noncompliance.

D10945 – 3,024 pieces received after 1/15/09 and for part number D10946 – 2,763 pieces received after 1/15/09.

4. Furnish the approximate percentage of the total number of items of equipment estimated to actually contain the defect or noncompliance:

100%

Identify and describe how the recall population was determined--in particular how the recalled models were selected and the basis for the beginning and final dates of manufacture of the recalled items of equipment:

The noncompliance was found through an aftermarket customer returned claim. The above part numbers were returned in this claim which led to additional follow up by the manufacturer. Through the manufacturer's analysis they deemed all parts fabricated for Qualis in 2009 could possibly have an issue that could duplicate the customer warranty claim. As stated earlier, the parts are from Motorpro dating back to 1/15/09 for part number D10945 and 1/15/09 for part number D10946 to present.

III. Describe the Defect or Noncompliance

5. Describe the defect or noncompliance. The description should address the nature and physical location of the defect or noncompliance. Illustrations should be provided as appropriate.

The defect occurs in the front chassis/corner module area, specifically the control arm with ball joint and its connection with the hub or spindle area. The ball stud may separate from the socket of the ball joint housing on the lower control arm. Both left and right side could be affected by this issue.

Describe the cause(s) of the defect or noncompliance condition.

The housing separated as a result of the case hardness being too deep. The hardness numbers (measured by the manufacturer Motorpro) indicate the case was through hardened. At the hardness range measured and depth, the material became brittle and could not withstand an impact load. The retaining ring groove located in the area of the induction hardened zone had sharp corners which was a probable place for a crack in the case to propagate to and separate when an impact load was applied to the ball joint.

Describe the consequence(s) of the defect or noncompliance condition.

When the ball stud separates from the socket of the ball joint housing of the lower control arm it results in the separation of the lower control arm to the spindle. Potentially allowing the wheel to fold and could cause the loss of steering ability. The two reported incidents had minimal damage.

Identify any warning which can (a) precede or (b) occur.

There is no warning at present time.

If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address.

Motopro Corporation
No. 21, Kungyeh 16th Rd.,
Taiping City Taichung,
Taiwan

Identify the name and title of the chief executive officer or knowledgeable representative of the supplier: Mr. Wayn Cho

IV. Provide the Chronology in Determining the Defect/Noncompliance

If the recall is for a defect, complete item 6, otherwise item 7.

6. With respect to a defect, furnish a chronological summary (including dates) of all the principle events that were the basis for the determination of the defect. The

summary should include, but not be limited to, the number of reports, accidents, injuries, fatalities, and warranty claims.

On 8/4/09 we received our first complaint for part numbers D10945 and D10946. The complaint was for a ball joint that came out of its housing. Qualis reviewed the part, found the part to be dimensionally in specification. We alerted the manufacturer Motorpro at which time they inspected current inventory and found all parts were acceptable to specifications.

Qualis Automotive sent the initial customer warranty claim part to the manufacturer for further evaluation. Motorpro conducted additional testing and concluded that a design change was needed.

We received our second customer complaint on 9/25/09. In that complaint the ball joint had come out of the housing causing the separation from the spindle (the failure was similar to the initial complaint). That is the connection point for the wheel. The end result was the customer's wheel turned inward rendering the vehicle inoperable. There was no one injured in the incident.

After the second complaint was received and deemed valid on 10/6/09, we notified the customer of the problem on 10/6/09 and quarantined all inventory. We worked with the supplier to fully understand why the defect occurred and what design and/or process changes could be made to fix it. Motorpro changed the design and Qualis Automotive approved the new design on 10/7/09.

We looked at how many parts were sold to our customers since the known dates of initial receipt as mentioned in section II. We have had two warranty claims with the 4 affected part numbers (D10945, D10946, G10945, and G10946) in those 5,787 pieces sold.

7. With respect to a noncompliance, identify and provide the test results or other data (in chronological order and including dates) on which the noncompliance was determined.

V. Identify the Remedy

8. Furnish a description of the manufacturer's remedy for the defect or noncompliance. Clearly describe the differences between the recall condition and the remedy. The original design of the ball joint had a retaining ring groove on the OD of the housing and the induction hardness specification only stated a minimum requirement. The new ball joint design no longer has the retaining ring groove and the induction hardness specifications were added to the drawing with both upper and lower limits. The limits to the induction hardness will eliminate the over hardening of the ball joint.

Clearly describe the distinguishing characteristics of the remedy component/assembly versus the recalled component/assembly. The only visual difference that will be seen between the old design and the new design is the absence of the retaining ring groove. This can only be seen if the rubber boot on the ball joint is removed.

Identify and describe how and when the recall condition was corrected in production. If the production remedy was identical to the recall remedy in the field, so state. If the product was discontinued, so state.

The ball joint design was changed on October 5, 2009. Production started immediately after the approval of the new design. Replacement parts are expected to be available on approximately October 28, 2009. All parts in the field were requested to be returned for rework on October 7, 2009. The customer was notified to stop all sales of the part numbers in question. Rework will consist of replacing the old ball joint design with the new designed ball joint into the existing control arm.

VI. Identify the Recall Schedule

Furnish a schedule or agenda (with specific dates) for notification to other manufacturers, dealers/retailers, and purchasers. Please, identify any foreseeable problems with implementing the recall.

Qualis Automotive is currently discussing the notification plan with current customers. The request has been made to customers to return all potentially defective parts.

VII. Furnish Recall Communications

9. Furnish a final copy of all notices, bulletins, and other communications that relate directly to the defect or noncompliance and which are sent to more than one manufacturer, distributor, or purchaser. This includes all communications (including both original and follow-up) concerning this recall from the time your company determines the defect or noncompliance condition on, not just the initial notification. *A DRAFT copy of the notification documents should be submitted to this office by Fax (202-366-7882) for review prior to mailing.*

Note: These documents are to be submitted separately from those provided in accordance with Part 573.8 requirements.