



U.S. Department  
of Transportation  
**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

Investigation: PE 03-039  
Prompted By: OWNER COMPLAINTS  
Date Opened: 08/11/2003  
Principal Investigator: ROBERT YOUNG  
Subject: MOTORCYCLE REAR SUSPENSION COLLAPSE

Manufacturer: AMERICAN HONDA MOTOR CO.  
Products: 2001-2003 HONDA GL1800 GOLD WING  
Population: 10000

Problem Description: CENTERSTAND CROSSMEMBER WELDS FAIL AND CROSSMEMBER SEPARATES FROM FRAME. REAR SUSPENSION THEN COLLAPSES WHILE RIDING AND MOTORCYCLE UNDERSIDE DRAGS ON THE GROUND.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	4	0	4
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	4	0	4

\*Description Of Other: CRACKED CROSSMEMBER WELDS

Action: OPEN A PRELIMINARY EVALUATION (PE) AND GATHER ADDITIONAL INFORMATION ABOUT THIS SUBJECT.

Engineer: Bob Young

Date: 08/11/2003

Div. Chief: Richard Boyd

Date: 08/11/2003

Office Dir.: Kathleen C. DeMeter

Date: 08/11/2003

Summary: ODI HAS RECEIVED INFORMATION FROM PARTICIPANTS IN CERTAIN DISCUSSION BOARDS ON WWW.GL1800RIDERS.COM ALLEGING THAT THE LOWER-MOST CROSSMEMBER (TO WHICH THE CENTERSTAND AND REAR SUSPENSION LINKAGE ARE ATTACHED) SEPARATES DUE TO FAILURE OF THE WELDS SECURING IT TO THE FRAME. WHEN THIS OCCURS, THE REAR SUSPENSION COLLAPSES WITHOUT WARNING AND THE MOTORCYCLE UNDERCARRIAGE (TYPICALLY THE RETRACTED CENTERSTAND) DRAGS ON THE GROUND. IN SOME INSTANCES, REAR TIRE/FENDER CONTACT ALSO RESULTS. OF THE EIGHT OWNERS CITED BY ODI, FOUR HAD CROSSMEMBER SEPARATION AND SUSPENSION COLLAPSE WHILE RIDING. THE OTHER FOUR, HAVING BEEN ALERTED TO THE PROBLEM BY POSTS ON THE GL1800RIDERS.COM DISCUSSION BOARDS, FOUND CRACKED CROSSMEMBER WELD(S) - AN ALLEGED PRECURSOR TO CROSSMEMBER SEPARATION. OF THE EIGHT OWNERS WE'VE REFERENCED, SEVEN HAVE NEGOTIATED "BUY-BACKS" WITH HONDA.

TO GATHER MORE INFORMATION ABOUT THE SCOPE AND FREQUENCY OF THIS ISSUE (SUDDEN AND UNFORESEEN MOTORCYCLE SUSPENSION COLLAPSE), WE HAVE OPENED THIS PRELIMINARY EVALUATION (PE).

PLEASE REFER TO THE ATTACHED MEMO FOR ADDITIONAL INFORMATION.



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# Memorandum

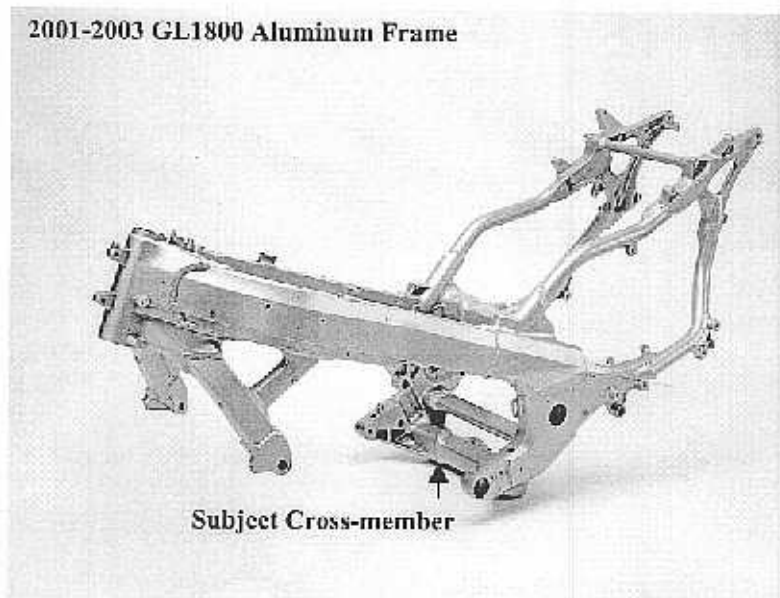
**Subject:** Myr 2001-2003 Honda GL1800 "Gold Wing" Suspension Collapse  
due to cross-member separation.

**Date:** August 11, 2003

**From:** Bob Young - ODI

**To:** Public File, PE03-039

When introduced for the 2001 model year, Honda's GL1800 Gold Wing incorporated many significant changes over its predecessor, the GL1500. Among them was a twin-spar, aluminum frame. With Kaiser Aluminum components assembled (and welded) by Honda in Marysville, Ohio, the frame used far fewer pieces (31 vs. 130), was substantially lighter (~25 lbs.), and more rigid than its steel predecessor.



Recently, on [www.GL1800riders.com](http://www.GL1800riders.com) some owners alleged the suspension collapsed on their GL1800 while riding the motorcycle. In each instance, a separated cross-member was found. In some cases, the welds joining the cross-member and frame were cracked although a separation had not occurred.

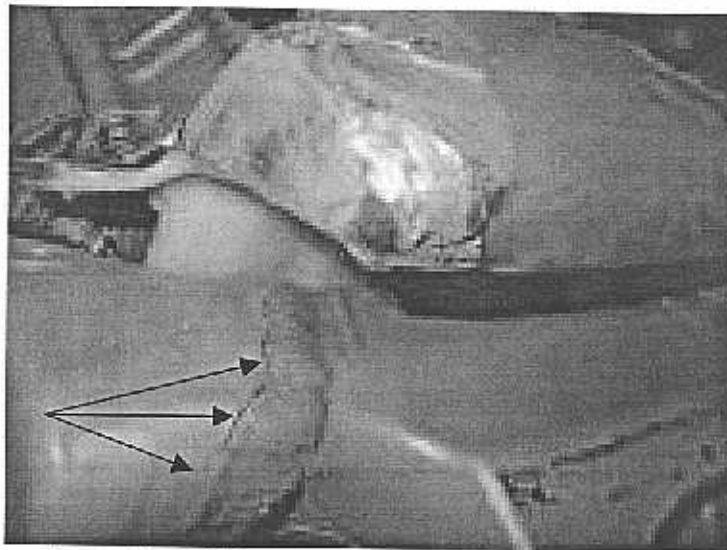
To date, ODI is aware of at least 8 GL1800's with either cracked cross-member welds or separated cross-members. Those with cross-member separations report that the event was unforeseen and occurred without warning. When a separation occurred, they allege that the suspension "collapses" with resulting contact between the top of the rear tire and fender underside and, in some instances, the bottom of the motorcycle drags on the ground.

Honda has been negotiating a motorcycle "buy-back" with those GL1800 owners whose bikes have cracked welds or separated cross-members. Honda has negotiated buy-backs with seven of the eight owner's ODI cites.

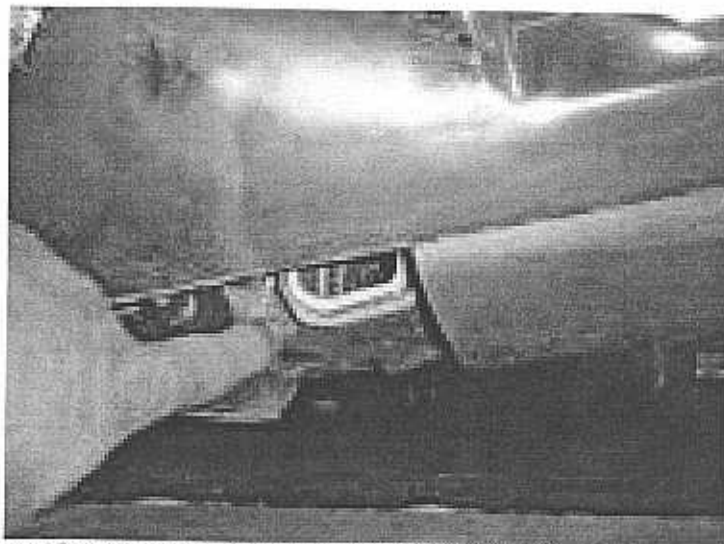
The following details the eight reports referenced in this memo:

No.	State	BuyBack?	VIN	MYR	BldDte	BuyDte	IncDte	Miles	Mode
1	TX	Y	201208	2003	May-02	8/29/02	7/27/03	6000	Separated welding
2	WA	Y	200450	2003	Jun-02	9/11/02	6/17/03	5200	Separated welding
3	TX	Y	202940	2003	Jun-02	3/29/03	7/1/03	11476	Separated welding
4	MI	Y	207743	2003	Dec-02	3/8/03	8/1/03	3445	Separated welding
5	FL	Y	113152	2002	Apr-02	7/25/02	7/25/03	10185	Weld crack found during owner inspection
6	TX	Y	201150	2003	May-02	7/12/02	7/24/03	21000	Weld crack found during owner inspection
7	CA	Y	200573	2003	Jul-02	9/30/02	7/25/03	17000	Weld crack found during owner inspection
8	GA		200011	2003	Apr-02	7/30/02	8/1/03	35555	Weld crack found during owner inspection

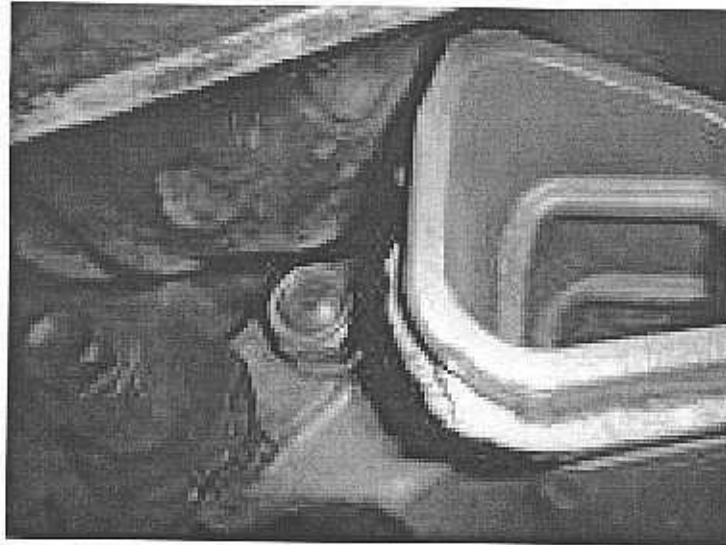
The following photographs, found on GL1800riders.com, document some of the referenced failures:



Cracked cross-member weld on VIN: 1HFSC47493A200573, Honda repurchased this motorcycle.



Cross-member separated while riding. VIN: 1HFSC47023A202940. Honda repurchased this motorcycle.



Same, close-up



Cross-member separated while riding. VIN: 1HFSC47063A201208. Honda repurchased this motorcycle.