



## Electronic Commerce

February 2004

*This document replaces the Electronic Commerce section, Page 71, in the Doing Business with Harley-Davidson guidebook dated March 1999.*

Harley-Davidson views electronic commerce (EC) as a key strategic initiative that is critical to the success of the organization. Electronic commerce can be broadly defined as the electronic transfer of information from one business partner to another. Included under the umbrella term of electronic commerce are an entire array of activities that include, but are not limited to, electronic data interchange (EDI), electronic funds transfers (EFT), electronic bar codes, e-mail, fax, electronic file transfers, and internet/intranet activities.

Harley-Davidson believes strongly in the benefits of EC. Some of those benefits are:

- More accurate information due to fewer data entry errors.
- Information can be entered once and used multiple times throughout the supply chain.
- Greater accessibility to information for all stakeholders.
- Reduced process cycle time due to more efficient exchange of information.
- Reduced process and transactional costs.

All Harley-Davidson suppliers are expected to actively use the most effective method of electronic commerce for communication between their organization and Harley-Davidson. The current expectations of suppliers are discussed in further detail below for each of the forms of electronic commerce currently used by Harley-Davidson.

Further information regarding Harley-Davidson's overall electronic commerce strategy can be obtained by contacting the appropriate Harley-Davidson purchasing representative or by contacting any member of the Electronic Commerce Council (refer to the *Contact* section on the Electronic Commerce web page for contact information).

Topics covered in this document are:

- Bar Codes
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## Bar Codes

All suppliers are **required** to attach the appropriate bar coded labels to all inbound shipments to Harley-Davidson. This requirement allows for efficient collection of data without the need for manual entry and decreases the amount of time in processing shipments into the plant. Eliminating manual entry helps minimize the amount of data errors and reduces the time required to collect data.

**It is important to note, compliance to the labeling requirements as directed is considered foundational to doing business with Harley-Davidson. Failure to comply as directed with labeling requirements will have an adverse affect on current and future business opportunities. Bar code compliance will be reported on the Supplier Performance System (SPS) Report.**

Further details on Harley-Davidson bar coding expectations are outlined in the *Bar Coding Requirements*, *Product Identification (B-10) Label Specifications*, and *Quick Receive (B-12) Label Specification* documents located on the Electronic Commerce web page, located on the Harley-Davidson Supplier Network.

## EDI

All Harley-Davidson suppliers are **required** to be an Electronic Data Interchange (EDI) trading partner regardless of the number of parts provided as it is an effective, cost-savings way to transact business and minimizes paper usage (i.e. letters, faxes, purchase orders). It is at the supplier's discretion as to which EDI software package (standalone or one that integrates with other software applications), EDI hardware and value added service provider to use.

**It is important to note that EDI compliance is considered a foundational requirement of doing business with Harley-Davidson. Failure to become fully EDI capable as directed will have an adverse affect on current and future business opportunities. ASN compliance will be reported on the Supplier Performance System (SPS) Report.**

EDI is currently the most widely used form of electronic commerce to execute business transactions between Harley-Davidson and its suppliers. EDI can be defined basically as the exchange of routine business documents in a standardized format. The document format most widely accepted in the business community and used by Harley-Davidson is the American National Standards Institute (ANSI). Utilizing this format allows for more efficient transfer of information from a Harley-Davidson business application directly into a supplier's business application or into a standalone EDI product.

Suppliers who chose to utilize the full functionality of an EDI transaction by directly integrating the transaction into their business applications are recognizing the increased benefit of electronic commerce by eliminating unnecessary process activities such as data entry. We encourage all suppliers to utilize this full functionality thereby enhancing the cost justification of EDI implementation.

Suppliers who use Sterling Web Forms, H-DSN, or another similar product will not eliminate process activities, but will meet the Harley-Davidson EDI requirement to be EDI capable.

## **Transactions**

Listed below are the EDI transactions currently exchanged between Harley-Davidson and the supplier or freight carrier:

- 210 - Motor Carrier Freight Details and Invoice
- 211 – Motor Carrier Bill of Lading
- 214 - Transportation Carrier Shipment Status Message
- 810 - Invoice (from suppliers)
- 820 - Payment Order / Remittance Advice
- 830 - Material Planning Schedule With Release Capabilities
- 850 - Purchase Order
- 856 - Advance Ship Notice (ASN)
- 862 - Material Shipment Schedule
- 997 - Functional Acknowledgement

## Transaction Requirements by Physical Location or Entity

Not all Harley-Davidson physical locations or entities use EDI to the same degree due to their specific business requirements; therefore, suppliers are expected to implement EDI as directed by their Harley-Davidson purchasing representative. The table below shows which EDI transactions are traditionally exchanged between the supplier and Harley-Davidson at each physical location or entity.

Business - Location	Planning Schedule	Ship Schedule	Advance Ship Notice	Purchase Order	Carrier Bill of Lading	Carrier Ship Status
	830	862	856	850	211	214
Freight Carriers					X	X
General Merchandise	X (as selected)		X	X		
OE - Brazil	X	X	X			
OE - Kansas City	X	X	X			
OE - Kansas City Powertrain	X	X	X			
OE - Powertrain (Capitol and Pilgrim)	X	X	X			
OE - Tomahawk	X	X	X			
OE - Tomahawk Kaphaem	X	X	X			
OE -York	X	X	X			
P&A	X (as selected)		X	X		
P&A Supplier Direct		X	X			

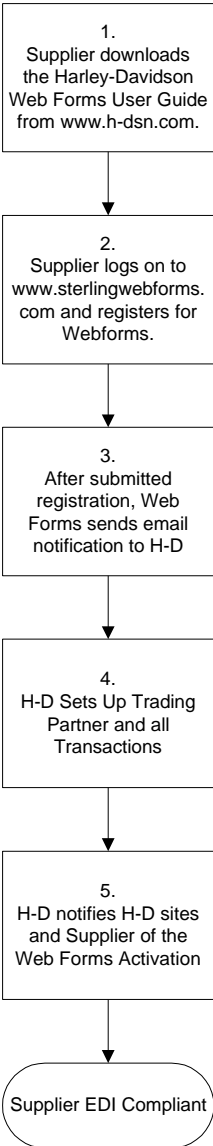
## Sterling Web Forms

Sterling Web Forms, a standalone EDI software developed by Harley-Davidson and Sterling Commerce, immediately enables suppliers to be EDI capable with Harley-Davidson using a personal computer and Internet access instead of the traditional EDI hardware, software and staffing. Sterling Web Forms provides a method for suppliers to receive and send EDI documents in an environment that is Window-based, user-friendly, and intuitive (no technical skills required other than basic Internet skills). Most importantly, Sterling Web Forms is affordable.

Sterling Web Forms allows the supplier to receive Planning Schedules, Purchase Orders and Ship Schedules and to create (with minimal data entry) and send Advance Ship Notices (ASN), an electronic document that reflects the contents of the shipment. Sterling Web Forms also interfaces with Bar Code Solutions' subscription *Web Print*, an Internet-based bar coding application, which allows bar coded container labels to be created by using the data from the ASN.

For additional information on the Sterling Web Forms produce, refer to the Harley-Davidson *Web Forms User Guide*, which includes step-by-step instructions on how to register, use and maintain Sterling Web Forms, and is available on the Electronic Commerce web page. If after referencing the guide and questions remain, please contact the Corporate EC Coordinator, whose telephone number and email is listed in the Contacts section on Electronic Commerce web page.

The process of becoming EDI capable using Sterling Web Forms is below:



## Harley-Davidson Supplier Network - EDI

Harley-Davidson Supplier Network (H-DSN) is a new Harley-Davidson Internet EDI application that allows suppliers to view their Planning and Ship Schedules and to send Advance Ship Notices. Currently, supplier participation is limited, but if you would like to be considered as a user, please contact your Harley-Davidson purchasing representative or a member of the Electronic Commerce Council. For additional information regarding H-DSN, refer to the Harley-Davidson Supplier Network section later in the document.

## Implementation Process for Other EDI Products

If it is determined that Sterling Web Forms or H-DSN is not the best EDI method for your company, then it will be the supplier's responsibility to:

- select the EDI software package, EDI hardware, and value added service provider that will meet the identified EDI requirements,
- obtain the published Harley-Davidson EDI standards from the Electronic Commerce web page, located on the Harley-Davidson Supplier Network.
- set up the necessary EDI transactions based upon the Harley-Davidson's physical location or entity business requirements, and
- test and obtain specific transaction certification status from Sterling Commerce, Harley-Davidson's EDI business partner,

within the timeframe agreed upon by the supplier and Harley-Davidson.

As mentioned previously, Harley-Davidson does not require suppliers to use a specific software package, hardware or network provider. However, if the supplier is looking for a recommendation, Harley-Davidson recommends Sterling Commerce as it is our strategic electronic commerce partner. Sterling Commerce has a variety of EDI software packages that can meet your needs.

For additional information regarding the Harley-Davidson EDI requirements and Sterling Commerce contact information, visit the Electronic Commerce web page, located on the Harley-Davidson Supplier Network.

## Transaction Testing

If Sterling Web Forms or H-DSN is not used as the EDI method, then all exchanged EDI transactions must be tested with Sterling Commerce within the agreed-upon timeframe and prior to Harley-Davidson sending requirements or receiving ASNs via EDI.

After the selected EDI software, hardware and value added service provider has been selected and set up to accommodate the Harley-Davidson EDI standards, the Sterling Commerce Implementation Specialist must be contacted to make testing arrangements. Refer to the *Contact* section on the Electronic Commerce web page, located on the Harley-Davidson Supplier Network.

### **830, 850 and 862 Testing Information**

The EDI 830 (Planning Schedule), 850 (Purchase Order) and 862 (Ship Schedule) transactions are individual tests and are free to the supplier. These are Harley-Davidson's outbound transactions. To meet certification for each test, the supplier's EDI system must accept the EDI document sent from Harley-Davidson testing EDI sender/receiver ID (sent from Sterling Commerce) and return an accepted functional acknowledgement (EDI 997).

After the transaction has been certified and moved into production, ensure that the ISA and GS segments include the Harley-Davidson production EDI sender/receiver ID.

### **856 Testing Information**

The EDI 856 (Advance Ship Notice) test requires the supplier to incur a testing fee that must be prepaid to Sterling Commerce prior to the test. This is Harley-Davidson's inbound transaction. At the time of this publication, Sterling Commerce's 856 testing fee is as follows:

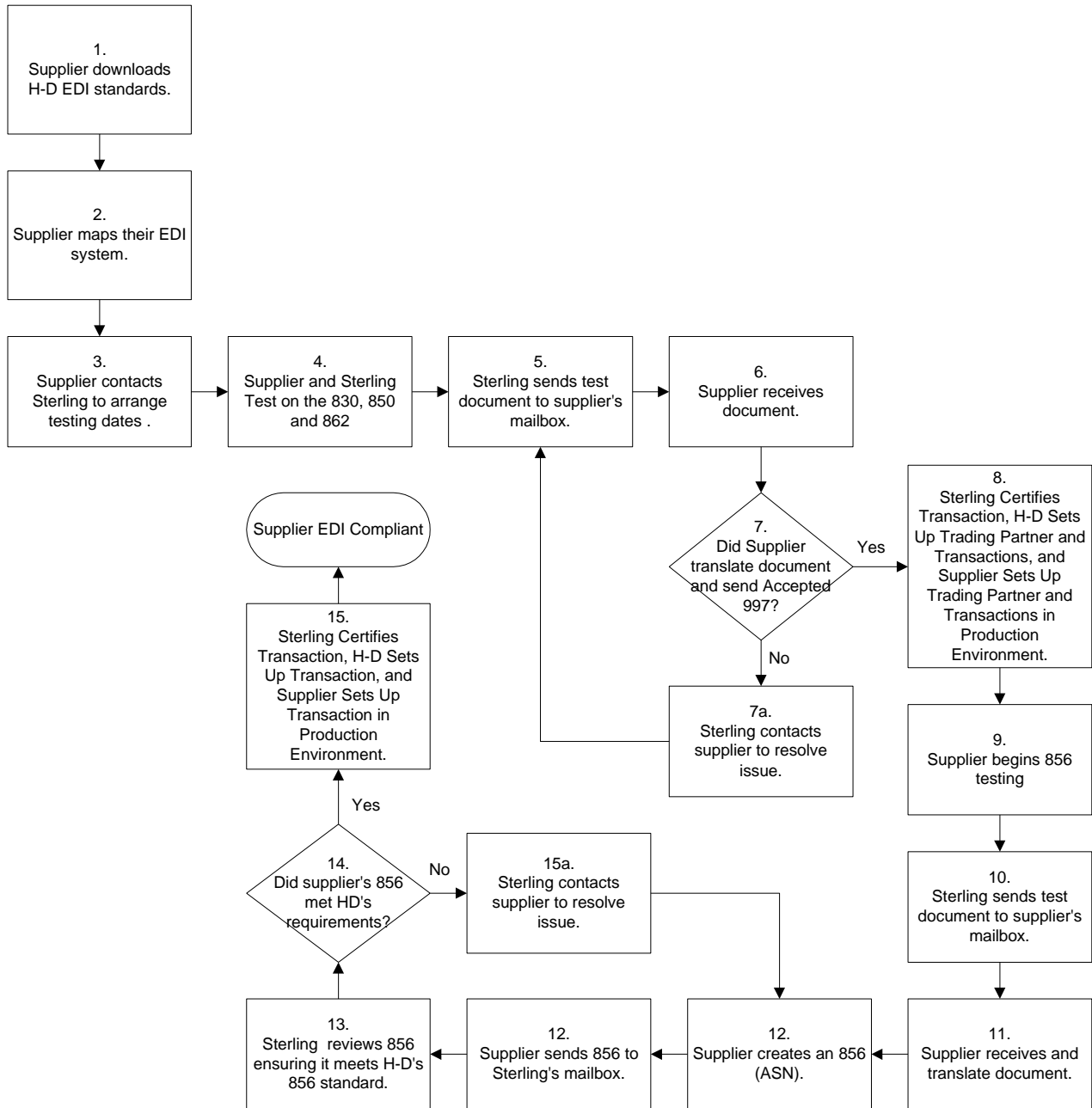
- \$400 for Sterling Commerce COMMERCE:Network customers who prepay the testing fee.
- \$450 for Non-Sterling Commerce COMMERCE:Network customers who must prepay the testing fee.
- \$500 for Sterling Commerce COMMERCE:Network customers who have the testing fee invoiced.

To obtain certification for this test, the supplier must send to the Harley-Davidson testing EDI sender/receiver ID (sent to Sterling Commerce) an 856 that meets the published Harley-Davidson standard. When Sterling Commerce receives the 856 test, it will be reviewed and Sterling Commerce will provide feedback to the supplier. It is expected that the supplier address the feedback in a timely manner and send another 856 for review. The 856 testing fee will cover all required 856 submittals until certification is obtain, *provided submittals are sent in a timely manner.*

After the transaction has been certified and moved into production, ensure that the ISA and GS segments include the Harley-Davidson production EDI sender/receiver ID.

It is the responsibility of the supplier to implement the lessons learned from the testing experience to the production environment, which includes system modifications and training of the individual creating ASNs. When training the individual creating ASNs, it is recommended that they have a copy of the 856 standard as it provides detailed information that will assist them in completing the ASN.

### Process Flow for Implementing Other EDI Products



## Freight Carrier EDI Requirements

Harley-Davidson accepts 211 (Motor Carrier Bill of Lading) and 214 (Transportation Carrier Shipment Status Message) EDI transactions from *specific* freight carriers, which are selected by Harley-Davidson Transportation. Harley-Davidson Transportation will contact the freight carrier when 211 and 214 transactions are required.

Prior to sending the 211 and 214 EDI transactions to Harley-Davidson, the freight carrier must test the transaction with Harley-Davidson Transportation and/or Sterling Commerce. Please contact the Harley-Davidson Transportation to make the testing arrangements. The 211 and 214 EDI standards are available on the Electronic Commerce web page.

## Trading Partner

Once the supplier becomes EDI capable or completes testing (if required), all communication of Harley-Davidson requirements and notification to Harley-Davidson of inbound shipments is done electronically using EDI.

Ensure that the individual(s) responsible for sending ASNs to Harley-Davidson knows how to thoroughly complete them. It is recommended that they have the appropriate Harley-Davidson user guide or the EDI 856 standard at their fingertips and as they provide detailed information that will assist them in completing an ASN.

The supplier, as well as the purchasing or materials representative, has the responsibility of monitoring the accuracy and effectiveness of each EDI transaction. Harley-Davidson edits all ASNs as soon as they are received and within seconds, the supplier is emailed or faxed an *Advance Ship Notice Edit Report* listing the errors found and the corrective action. Harley-Davidson expects the supplier to immediately correct the errors and retransmit the ASN(s).

All errors are recorded to provide a monthly supplier ASN accuracy rating. The ASN accuracy rating will be incorporated into the Supplier Performance System (SPS) report. Harley-Davidson's expectation is that all suppliers have a 100 percent ASN accuracy rating.

Any questions the supplier has should be directed to the purchasing representative or a member of the Electronic Commerce Council.

## **Electronic File Transfer**

Electronic file transfers are used to transfer large files that cannot be efficiently transferred via e-mail. The most prevalent use of electronic file transfers at Harley-Davidson is the transfer of engineering drawings between Harley-Davidson and suppliers. This process enhances the product development process by allowing both Harley-Davidson and the supplier to utilize the same drawing file. This effectively leads to a substantial reduction in the amount of time required in the development process. Harley-Davidson currently utilizes Pro-Engineering (Pro-E) as its computerized design tool. Suppliers are not required to use Pro-E, however their system must be compatible in order to take advantage of electronic file transfers.

## **Electronic Funds Transfers**

Electronic Funds Transfers (EFT) refers to the automatic transfer of funds from one business or personal entity to another. Harley-Davidson continues to expand this area of electronic commerce. Suppliers should contact Harley-Davidson to express interest in initiating EFT transactions between our organizations.

## **E-Mail**

E-mail continues to be recognized as a very effective means of electronic commerce. The benefits are faster communication between stakeholders as well as the ability to transfer actual files between Harley-Davidson and its suppliers. This type of electronic commerce tends to be most effective with transferring items such as letters, notes, internal memos, forms, spreadsheets, and other smaller less complex forms of communication.

Although Harley-Davidson does not formally require suppliers to have an e-mail address, suppliers that invest in an e-mail address find that communication occurs faster and more frequent. Similar to fax machines, e-mail is quickly becoming considered one of the minimal requirements to operate any business entity.

## **Fax**

Like many organizations Harley-Davidson utilizes the fax machine to electronically transmit several forms of communications to suppliers. These may include manually transmitted communication such as letters, forms, notes, daily shipping schedules, smaller engineering drawings, and Requests for Proposals. Harley-Davidson also transmits communication automatically to suppliers. Examples of the types of “autofaxed” communications may include purchase orders, shipping schedules / material releases, or ASN error reports.

Although the use of fax machines may be the easiest form of electronic commerce to implement, it is also the most limited in terms of eliminating unnecessary processes within the supply chain. That is, a fax only transmits an image and cannot be used to automatically load information into a business application. Although fax machines will continue to be utilized within the organization, Harley-Davidson will continue to move to more effective means of electronic commerce.

It is generally accepted that all suppliers to Harley-Davidson will have direct access to a fax machine. It is considered one of the minimal requirements to operate any business entity.

## **Harley-Davidson Supplier Network**

The Harley-Davidson Supplier Network (H-DSN) is an Internet-based single point of contact for information regarding doing business with Harley-Davidson. H-DSN is accessed through [www.h-dsn.com](http://www.h-dsn.com).

## **Public Information**

H-DSN provides informative, public information that will assist the supplier in meeting Harley-Davidson business expectations and is accessed by pressing the Public Menu button (no User ID or Password required). This information includes General Business Information (i.e., Electronic Commerce Information, Packaging Specifications), Supplier Diversity and Harley-Davidson News.

## **Electronic Commerce**

The Electronic Commerce page contains:

- Electronic Commerce Information
- EDI Standards
- Bar Coding Specifications
- Sterling Web Forms User Guide
- ASN Troubleshooting Information
- Harley-Davidson and Sterling Contact Information

Please make note of this page and visit often as any new and useful information will be posted here.

## **Secured Information**

H-DSN allows suppliers with a Harley-Davidson assigned User ID and Password to view Planning Schedules, Shipping Schedules, and the Supplier Profile Manager as well as the same information that is available on the Public menu. User can also send ASNs.

The Supplier Profile Manager includes the Supplier Profile, Financial Profile, Contacts, Relationship, System Evaluation and Facilities.

Suppliers having access to the secured information on H-DSN will be required to maintain their supplier profile as well as communicate any necessary information in regards to doing business with Harley-Davidson.

To request access, contact your Harley-Davidson purchasing representative who will forward the request to H-DSN Business Support. Once access is approved, training is required prior to receiving a User ID and Password.

## **Internet**

Suppliers and enthusiast can view the latest Harley-Davidson products, locate a dealer, learn of new things to experience, review company information, and ect. on [www.harley-davidson.com](http://www.harley-davidson.com).

## **Intranet**

RIDE, Rapid Information Delivery and Exchange, is the Harley-Davidson intranet. H-D employees, consultants, interns and temps may have access to RIDE with a supervisor/sponsor request. RIDE is a central depository for business related information.

## **Material Replenishment Process**

Harley-Davidson is committed to reducing overall costs in the material replenishment process. Electronic commerce is recognized as a way to transfer information quickly and accurately throughout the supply chain. Harley-Davidson also recognizes that the more integrated the electronic commerce methods throughout the supply chain, the more effective and efficient that supply chain can be. More effective and efficient processes will reduce the overall costs within that supply chain.

The next page illustrates Harley-Davidson's recommended replenishment process flow utilizing EDI transactions and bar code labels to create a more efficient replenishment process.

