



ELECTRONIC DATA INTERCHANGE

Implementation Guidelines

850 -- Outbound Purchase Order

January 2003

General Overview

Electronic Data Interchange (EDI) is the computer-to-computer exchange of business documents in a standard format. EDI is currently used for most common business transactions, such as purchase orders, invoices, etc. EDI eliminates the need for a large portion of paper documents by processing the same information via computers.

The American National Standards Institute (ANSI) has established an Accredited Standards Committee (ASC) to develop uniform standards for EDI. Henry Schein, Inc. (“HSI”), will only accept ANSI ASC X12 standards. The preferred versions of ANSI ASC X12 standards supported by Henry Schein, Inc., at this time are version/release 4010.

Henry Schein, Inc., uses Sterling Commerce as its primary value-added network (“VAN”) to exchange EDI documents with its trading partners. If a trading partner has an established communication link with another VAN, Henry Schein, Inc., will communicate utilizing inter-connects.

Included are copies of HSI’s documentation and the interchange control structure for outbound **Purchase Orders (Transaction Set 850)**. Henry Schein utilizes ISA/IEA enveloping at the interchange level and GS/GE enveloping at the function group level to ensure correct addressing.

Segments that are italicized have been added for purposes of drop ship orders.

HSI expects to receive a **Functional Acknowledgment (Transaction Set 997)** for each purchase order sent to a trading partner.

If you have any questions regarding Henry Schein’s EDI program, please refer to Appendix B.

Interchange Control Structure
Control Segment: ISA

Henry Schein, Inc.
Trading Partner EDI implementation Guide

Segment: ISA -- Interchange Control Header
Level: --
Loop: --
Usage: Mandatory
Max. Use: 1
Purpose: To start and identify an interchange of one or more functional groups and interchange-related control segments

Elem ID	Elem No.	Name	Req. Des	Data Type	Min/Max Length	Comments
ISA01	101	Authorization Information Qualifier	M	ID	02/02	Code used to identify the type of information in the Authorization Information: 00 -- No Authorization Information Present
ISA02	102	Authorization Information	M	AN	10/10	Not used unless required by receiver
ISA 03	103	Security Information Qualifier	M	ID	02/02	Code to identify the type of information in the Security information: 00 -- No Security Information Present
ISA 04	104	Security Information	M	AN	10/10	Not used unless required by receiver
ISA05	105	Interchange ID Qualifier	M	ID	02/02	Qualifier to designate the system/method of code structure used to designate the sender ID element being qualified: 01 -- DUNS number
ISA06	106	Interchange Sender ID	M	ID	15/15	Identification code published by the sender of the data: 012430880 -- HSI's DUNS Number
ISA07	105	Interchange ID Qualifier	M	ID	02/02	Qualifier to designate the system/method of code structure used to designate the receiver ID element being qualifier: Receiver Defined

Interchange Control Structure
Control Segment: ISA

Henry Schein, Inc.
Trading Partner EDI Implementation Guide

Segment: **ISA - Interchange Control Header (Cont.)**

Elem ID	Elem No.	Name	Req. Des	Data Type	Min/Max Length	Comments
ISA08	107	Interchange Receiver ID	M	ID	15/15	Identification code published by the receiver of the data: Receiver Defined
ISA09	108	Interchange Date	M	DT	08/08	Date of the interchange (CCYYMMDD)
ISA10	109	Interchange Time	M	TM	04/04	Time of Interchange (HHMM)
ISA11	110	Interchange Control Standards Identifier	M	ID	01/01	Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer: U -U.S. EDI Community of ASCx12, TDCC, and UCS
ISA 12	111	Interchange Control Version Number	M	ID	05/05	This version number covers the interchange control segments and the functional group control segments: 00401
ISA13	112	Interchange Control Number	M	N0	09/09	This number uniquely identifies the interchange data to the sender
ISA14	113	Acknowledgment Requested	M	ID	01/01	Code sent by the sender to request an interchange acknowledgment: 0 - No Acknowledgment requested
ISA15	114	Test Indicator	M	ID	01/01	Code to indicate whether data enclosed by this interchange envelope is test or production: P – Production Data
ISA16	115	Sub-element Separator	M	AN	01/01	Code to indicate Sub-element separator: :

Interchange Control Structure
Control Segment: IEA

Henry Schein, Inc.
Trading Partner EDI Implementation Guide

Segment: IEA -- Interchange Control Trailer
Level: --
Loop: --
Usage: Mandatory
Max. Use: 1
Purpose: To define the end of an interchange of one or more function groups and interchange-related control segments

Elem ID	Elem No.	Name	Req. Des	Data Type	Min/Max Length	Comments
IEA01	116	Number of Included Functional Groups	M	N0	01/05	Total number of functional groups included in this interchange
IEA02	112	Interchange Control Number	M	N0	09/09	This number uniquely identifies the interchange data to the sender

Interchange Control Structure
Control Segment: GS

Henry Schein, Inc.
Trading Partner EDI Implementation Guide

Segment: GS -- Functional Group Header
Level: --
Loop: --
Usage: Mandatory
Max. Use: 1
Purpose: To indicate the beginning of a functional group and to provide control information

Elem ID	Elem No.	Name	Req. Des	Data Type	Min/Max Length	Comments
GS01	479	Functional Group ID Code	M	ID	02/02	Code identifying a group of application related transaction sets: PO --Purchase Order (850)
GS02	142	Application Sender's Code	M	AN	02/12	Code identifying the party sending transmission: 012430880
GS03	124	Application Receiver's Code	M	AN	02/12	Code identifying the party receiving transmission: Receiver Defined
GS04	029	Functional Group Date	M	DT	08/08	Date functional group generated by sender (CCYMMDD)
GS05	030	Function Group Time	M	TM	04/04	Time functional group generated by sender (HHMM)
GS06	028	Functional Group Control Number	M	NO	01/09	Assigned number originated and maintained by the sender
GS07	455	Responsible Agency Code	M	ID	01/02	X -- Accredited Standard Committee X12
GS08	480	Version/Release/Industry Identifier Code	M	ID	01/12	Code indicating the version, release sublease and industry identifier of the EDI standards being used 004010

Interchange Control Structure
Control Segment: GE

Henry Schein, Inc.
Trading Partner EDI Implementation Guide

Segment: GE -- Functional Group Trailer
Level: --
Loop: --
Usage: Mandatory
Max. Use: 1
Purpose: To indicate the end of a functional group and to provide control information

Elem ID	Elem No.	Name	Req. Des	Data Type	Min/Max Length	Comments
GE01	097	Number of Included Transaction Sets	M	NO	01/06	Total number of transaction sets included in the functional group
GE02	028	Functional Group Control Number	M	NO	01/09	Assigned number originated and maintained by the sender

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Henry Schein, Inc. sends electronic Purchase Orders to its suppliers in the following format

Header Information

Seg ID.	Name	Req. Des.	Max Use	Loop Repeat
ST	Transaction Set Header	M	1	
BEG	Beg. Segment for Purchase Order	M	1	
REF	Reference Identification	O	100	
DTM	Date/Time Reference	O	10	
TD5	Carrier Details (Routing Sequence/Transit Time)	O	12	
N9	Reference Identification	O	1	N9/1,000
N1	Name	O	1	N1/200
N2	Additional Name Information	O	2	
N3	Address Information	O	2	
N4	Geographic Location	O	>1	
REF	Reference Identification	O	12	
PER	Administrative Communications Contact	O	>1	

Detail Information

Seg ID.	Name	Req. Des.	Max Use	Loop Repeat
PO1	Baseline Item Data	M	1	PO1/100,000
PID	Product/Item Description	O	1	PID/1,000
REF	Reference Identification	O	>1	

Summary Information

Seg ID.	Name	Req. Des.	Max Use	Loop Repeat
CTT	Transaction Totals	O	1	CTT/1
SE	Transaction Set Trailer	M	1	

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Segment: ST - Transaction Set Header
Level: Header
Loop: --
Usage: Mandatory
Max. Use: 1
Purpose: To indicate the start of a transaction set and to assign a control number

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
ST01	143	Transaction Set ID Code	M	ID	03/03	Code uniquely identifying a transaction set: 850 - Purchase Order
ST02	329	Transaction Set Control No.	M	AN	04/09	Identifying control number assigned by the originator for a transaction set

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Segment: BEG -- Beginning Segment for Purchase Order
Level: Header
Loop: --
Usage: Mandatory
Max. Use: 1
Purpose: To indicate the beginning of the purchase order transaction set and transmit identifying numbers

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
BEG01	353	Trans. Set Purpose Code	M	ID	02/02	Code identifying purpose of the transaction set: 00 - Original
BEG02	092	Purchase Order Type Code	M	ID	02/02	Code identifying type of purchase order: SA - Stand Alone DS - Drop Ship
BEG03	324	Purchase Order Number	M	AN	01/22	Purchase Order Number
BEG05	373	Purchase Order Date	M	DT	08/08	Purchase Order Date (CCYYMMDD)

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Segment: REF -- Reference Identification
Level: Header
Loop: --
Usage: Optional
Max. Use: 100
Purpose: To transmit information in a free-form format, if necessary, for comment or special instruction

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
REF01	128	Note Reference Code	M	ID	02/03	ZZ - Mutually defined
REF03	352	Reference Identification	C	AN	01/80	Description (Free-form text)

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Segment: DTM - Date/Time Reference
Level: Header
Loop: --
Usage: Optional
Max. Use: 10
Purpose: To specify pertinent dates and times

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
DTM01	374	Date/Time Qualifier	M	ID	02/02	Code identifying type of date: 002
DTM02	373	Date	X	DT	08/08	Date (CCYYMMDD)

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Segment: TD5 - Carrier Details (Routing Sequence/Transit Time)
Level: Header
Loop: --
Usage: Optional
Max. Use: 12
Purpose: To specify the carrier, sequence of routing and transit time information

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
TD504	091	Transportation Method Type	M	ID	01/02	Code identifying the method or type of transportation: T - Best Way (Shipper's Option)
TD505	387	Origin Carrier Name	O	AN	01/35	Blank, unless per contact

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Segment: *N9 – Reference Identification*
Level: Header
Loop: N9/1,000
Usage: Optional
Max. Use: 1
Purpose: To transmit identifying information as specified by the Reference Identification Qualifier

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
N901	128	Reference Identification Qu	M	ID	02/03	Code qualifying the Reference Identification: AI – Associated Invoice; AN – Associated PO
N902	127	Reference Identification	C	AN	01/30	Reference information as defined for a particular Transaction Set or as specified by the Reference Qualifier

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Segment: *NI - Name*
Level: Header
Loop: N1/200
Usage: Optional
Max. Use: 1
Purpose: To identify a party by type of organization, name and code

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
N101	098	Entity Identifier Code	M	ID	02/03	Code identifying organizational entity or physical location: ST - Ship to
N102	093	Name	C	AN	01/60	Free-form Name
N103	066	Identification Code Qualifier	C	ID	01/02	Code designating the system/method of code structure used for the following Identification Code: 9 - DUNS + Digit Suffix; ZZ – Mutually defined for customer drop ship account #
N104	067	Identification Code	C	AN	02/80	Code identifying a party or other code, HSI “Ship To” locations or customer drop ship account

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Segment: *N2 – Additional Name Information*
Level: Header
Loop: N2
Usage: Optional
Max. Use: 2
Purpose: To specify additional names or those longer than 35 characters in length

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
N201	093	Name	M	AN	1/60	Free-form name

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Segment: *N3 – Address Information*
Level: Header
Loop: N3
Usage: Optional
Max. Use: 2
Purpose: To specify the location of the named party

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
N301	166	Address Information	M	AN	01/55	Address information
N302	166	Address Information	O	AN	01/55	Address information

Segment: *N4 – Geographic Location*
Level: Header
Loop: N4
Usage: Optional
Max. Use: >1
Purpose: To specify the geographic place of the named party

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
N401	019	City Name	M	AN	02/30	Free-form text for city name
N402	156	State or Province Code	M	ID	02/02	Code as defined by government agency
N403	116	Postal Code	M	ID	03/15	Code defining international postal zone code excluding punctuation & blanks (zip code for US)

Segment: *REF -- Reference Identification*
Level: Header
Loop: --
Usage: Optional
Max. Use: 12
Purpose: To transmit information in a free-form format, if necessary, for comment or special instruction

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
REF100	128	Reference Identification Qu	M	ID	02/30	DH – DEA #
REF02	127	Reference Identification	M	AN	02/30	Drop Ship Customer DEA # if applicable

Segment: *PER – Administrative Communications Contact*
Level: Header
Loop: --
Usage: Optional
Max. Use: >1
Purpose: To identify a person of office to whom the administration communications should be directed

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
PER01	366	Contact Function Code	M	ID	02/02	Code identifying the major duty or responsibility of the person or group; OC – Order Contacts
PER03	365	Communication Number Qualifier	C	ID	02/02	Code identifying the type of communication number; TE – Telephone Number
PER04	364	Communication Number	C	AN	01/80	Complete communications number including country or area code when applicable

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Segment: PO1 - Purchase Order Baseline Item Data
Level: Detail
Loop: PO1/100,000
Usage: Mandatory
Max. Use: 1
Purpose: To specify basic and most frequently used purchase order line item data
Comments: PO101 is the line item identification
 PO 106 - PO125 provide for ten different product/service ID's per each item
 f PO106 is present, then PO107 is required
 f PO108 is present, then PO109 is required

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
PO101	350	Assigned Identification	M	AN	01/20	Line item identification, assigned for differentiation within an order
PO102	330	Quantity Ordered	M	R	01/09	Quantity ordered
PO103	355	Unit of Measurement Code	M	ID	02/02	Code identifying the basic unit of measurement
PO104	212	Unit Price	C	R	01/17	Price per unit
PO106	235	Product/Service ID Qualifier	O	ID	02/02	Code identifying the type/source of the descriptive number used in element PO107: VC - Vendor's Catalog Number
PO107	234	Product/Service ID	C	AN	01/48	Identifying number for product
PO108	235	Product/Service ID Qualifier	O	ID	02/02	Code identifying the type/source of the descriptive number used in element PO109: CB - Buyer's catalog number
PO109	234	Product/Service ID	C	AN	01/48	Identifying number for product

Segment: *PID – Product/Item Description*
Level: Detail
Loop: PID/1,000
Usage: Optional
Max. Use: 1
Purpose: To describe a product or process in coded or free-form format

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
PID01	349	Item Description Type	M	ID	01/01	Code indicating the format of a description
PID05	352	Description	C	AN	01/80	A free-format description to clarify the related data elements and their content

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Segment: *REF -- Reference Identification*
Level: Detail
Loop: --
Usage: Optional
Max. Use: >1
Purpose: To transmit information in a free-form format, if necessary, for comment or special instruction

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
REF01	128	Reference Identification Qu	M	ID	02/03	ZZ – Mutually Defined
REF03	352	Description	C	AN	01/80	Free-form text

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Segment: CTT - Transaction Totals
Level: Summary
Loop: CTT/1
Usage: Optional
Max. Use: 1
Purpose: To transmit a hash total for a specific element in the transaction set

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
CTT01	354	Number of Line Items	M	NO	01/06	Total number of line items in the transaction set
CTT02	347	Hash Total	M	R	01/10	Total units ordered (sum of all PO102 in transaction set)

**Purchase Order
850 Transaction Set**

**Henry Schein, Inc.
Trading Partner EDI Implementation Guide**

Segment: SE - Transaction Set Trailer
Level: Summary
Loop: --
Usage: Mandatory
Max. Use: 1
Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Elem. ID	Elem. No.	Name	Req. Des.	Data Type	Min/Max Length	Comments
SE01	096	No. of included segments	M	NO	01/10	Total number of segments included in transaction set including ST and SE elements
SE02	329	Transaction Set Control No.	M	AN	04/09	Identifying control number assigned by the originator for a transaction set

Appendix A

HENRY SCHEIN INC.

“SHIP TO” CODE DESCRIPTIONS - “N104” ELEMENT

DUNS + 4	HENRY SCHEIN LOCATION
PRIMARY DC'S	
0124308800002	5315 West 74th Street, Bldg 138 Indianapolis, IN 46268
0124308800006	255 Vista Blvd. Sparks, NV 89434
0124308800009	8691 Jessie B. Smith Court Jacksonville, FL 32219
0124308800016	41 Weaver Road Denver, PA 17517
0124308800017	1001 Nolen Drive Suite 400 Grapevine, TX 76051
0124308800018	10920 West Lincoln Avenue West Allis, WI 53227
<i>OTHER LOCATIONS:</i> (Not applicable for all vendors)	
0124308800004	Delta Scientific 1979 Stout Drive, Bldg 5 Ivyland, PA 18974
0124308800007	C/o Hawaiian Express 14952 Valley View Ave. La Mirada, CA 90638
0124308800001	TEST PURPOSES ONLY (FACILITY IS NO LONGER ACTIVE)

Appendix B

EDI GENERAL AND TECHNICAL INFORMATION

MANAGER SUPPLY CHAIN SERVICES	Larry Stangl Voice: 631-843-5547 Fax: 631-843-5514 E-Mail: LARRY.STANGL@HENRYSCHEIN.COM
E-COMMERCE ANALYST	Joann Martino Voice: 631-843-5749 Fax: 631-843-5514 E-Mail: JOANN.MARTINO@HENRYSCHEIN.COM
E-COMMERCE ANALYST	Christina Liu Voice: 631-843-5502 Fax: 631-843-5514 E-Mail: CHRISTINA.LIU@HENRYSCHEIN.COM

COMMUNICATIONS/MAILBOX ID:	012430880
QUALIFIER:	01
GS ID:	012430880
VAN:	STERLING COMMERCE
(PREFERRED) X 12 VERSION:	4010
(PREFERRED) INTERCHANGE VERSION:	0400
SEGMENT TERMINATOR:	X15" (HEXIDECIMAL 15)
ELEMENT SEPARATOR:	*
SUBELEMENT SEPARATOR:	?
SCHEDULED COMMUNICATION SESSIONS: (INBOUND AND OUTBOUND)	8:00 AM, 9:00 AM, 10:00 AM, 11:00 AM, NOON, 1:00 PM, 2:00 PM, 3:00 PM, 4:00 PM, 5:00 PM, 6:00 PM, 7:00 PM, 8:00 PM