



Electronic Data Interchange

Transaction Set: 810 Supplier Invoice

ANSI X12 Version 4010

This specification covers the requirements for Grainger and our Business Units.

Grainger Parts

Grainger FindMRO

Supplier Invoice Requirements

- Supplier Invoice numbers can only be up to 16 positions in length
- Duplicate Invoices cannot be accepted
- Invoices will not be accepted with future invoice dates
- Invoices with allowances cannot be accepted via traditional edi
- Credit memos cannot be accepted via traditional edi
- All credits must be sent in paper format
- Any invoicing for freight only charges must be submitted to A/P in paper format
- Vendor number as referenced on the PO (REF segment with IA qualifier on the 850 PO), must be returned back on the Invoice in the REF segment. This number may have changed as part of the implementation, especially as it pertains to purchase orders from Grainger Sourcing and Parts
- Same item number can only be billed once on an invoice
- Grainger stock number (IT1 07) is a mandatory field on the 810. This requirement includes orders from all of Graingers purchasing groups including Grainger Sourcing (formerly FINDMRO) and Grainger Parts
- One PO number must be billed per invoice. There cannot be multiple PO's on an invoice
- The Unit of Measure in the IT1 03 must match the Unit of Measure sent in the PO1 03 on the purchase order
- Invoices should include only those items being shipped. No zero line items should be sent
- No zero amount for freight or tax lines should be sent
- We can only accept numeric values that represent 2 positions to the right of the decimal for all monetary values
- Any segments sent that are not on our Invoice Specifications and noncompliant invoices will be returned to you via email communication which will include your original data, and error report. These transactions will not be processed in our system
- If there are any questions regarding these business requirements, please contact Edita Shor in our Accounts Payable Team 1 –847-588-8712

Grainger 810 Specification

This specification covers the requirements for Grainger and our Business Units (Grainger Parts & Grainger FindMRO).

Grainger's Value Added Network (VAN):

Grainger uses the GE Global eXchange Services Network located in Gaithersburg, MD.

GE Global eXchange phone number: 1-800-334-2255.

Grainger Industrial Supply Invoice ISA ID Requirement

ISA and GS ID's will be provided when Supplier is moved to Production.

810 Invoice

Functional Group ID=**IN**

Heading:

<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>
ST	Transaction Set Header	M	1	
BIG	Beginning Segment for Invoice	M	1	
NTE	Note/Special Instruction	O	1	
REF	Reference Identification	M	1	
LOOP ID - N1				200
N1	Name	M	1	
N2	Additional Name Information	O	1	
N3	Address Information	M	1	
N4	Geographic Location	M	1	
DTM	Date/Time Reference	O	1	

Detail:

<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>
LOOP ID - IT1				200000
IT1	Baseline Item Data (Invoice)	M	1	
LOOP ID - PID				1000
PID	Product/Item Description	O	1	

Summary:

<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>
TDS	Total Monetary Value Summary	M	1	
LOOP ID - SAC				25
SAC	Service or Charge Information	O	3	
TXI	Tax Information	O	1	
CTT	Transaction Totals	M	1	
SE	Transaction Set Trailer	M	1	

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

Data Element Summary			
<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
ST01	143	Transaction Set Identifier Code	M ID 3/3
		Code uniquely identifying a Transaction Set	
		810 Invoice	
ST02	329	Transaction Set Control Number	M AN 4/9
		Identifying control number that must be unique within the transaction set	
		functional group assigned by the originator for a transaction set	

Segment: **BIG** Beginning Segment for Invoice
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates

Data Element Summary			
<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
BIG01	373	Invoice Date	M DT 8/8
		Date expressed as CCYYMMDD	
BIG02	76	Invoice Number	M AN 1/16
		Identifying number assigned by issuer	
BIG04	324	Grainger Purchase Order Number	M AN 10/10
		Identifying number for Purchase Order assigned by the orderer/purchaser	
BIG07	640	Transaction Type Code	M ID 2/2
		Code specifying the type of transaction	
		DR Debit Invoice	

Credit Memos cannot be accepted via EDI. Credit Memos should be sent on paper.

Segment: **NTE** Note/Special Instruction
Level: Heading
Usage: Optional
Max Use: 1
Purpose: To transmit information in a free-form format, if necessary, for comment or special instruction

Data Element Summary			
Ref.	Data	Name	Attributes
<u>Des.</u>	<u>Element</u>		
NTE01	363	Note Reference Code	O ID 3/3
		Code identifying the functional area or purpose for which the note applies	
		INV Invoice Instruction	
NTE02	352	Description	M AN 1/80
		A free-form description to clarify the related data elements and their content	

Segment: **REF** **Reference Identification**
Level: Heading
Usage: **Mandatory**
Purpose: To specify identifying information

Data Element Summary			
<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
REF01	128	Reference Identification Qualifier	M ID 2/2
		Code qualifying the Reference Identification	
		IA Grainger Internal Supplier Number	
REF02	127	Reference Identification	M AN 8/10

NOTE: The Grainger Internal Supplier Number must match the number as it is sent in the REF segment, IA Qualifier from the 850 Purchase Order

Segment: **N1** Name
Level: Heading
Usage: **Mandatory**
Purpose: To identify a party by type of organization, name, and code

Data Element Summary			
<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
N101	98	Entity Identifier Code	M ID 2/2
		Code identifying an organizational entity, a physical location, property or an individual	
		ST Ship To	
N102	93	Name	M AN 1/40
		Free-form name	
N103	66	Identification Code Qualifier	M ID 2/2
		92	
N104	67	Identification Code	M AN 3/4
		Grainger Plant Code	

NOTE: The Grainger Plant Code must match the value in the N104 of the N1 ST loop from the 850

Segment: **N2 Additional Name Information**
Level: Heading
Usage: **Optional**
Purpose: To specify additional names or those longer than 35 characters in length

Data Element Summary			
<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
N201	93	Name Free-form name	O AN 1/40
N202	93	Name Free-form name	O AN 1/40

Segment: **N3** Address Information
Level: Heading
Usage: Mandatory
Purpose: To specify the location of the named party

Data Element Summary			
<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
N301	166	Address Information	M AN 1/40
		Address information	
N302	166	Address Information	O AN 1/40
		Address information	

Segment: **N4** Geographic Location
Level: Heading
Usage: Mandatory
Purpose: To specify the geographic place of the named party

Data Element Summary			
<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
N401	19	City Name	M AN 2/30
N402	156	State or Province Code	M ID 2/2
N403	116	Postal Code	M ID 3/9
N404	26	Country Code	M ID 2/2

Segment: **DTM** Date/Time Reference
Level: Heading
Usage: Optional
Purpose: To specify pertinent dates and times

Data Element Summary			
<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
DTM01	374	Date/Time Qualifier	M ID 3/3
		Code specifying type of date or time, or both date and time	
		011 Shipped	
DTM02	373	Shipment Date	M DT 8/8
		Date expressed as CCYYMMDD	

Segment: **IT1** Baseline Item Data (Invoice)
Level: Detail
Usage: Mandatory
Purpose: To specify the basic and most frequently used line item data for the invoice and related transactions

Data Element Summary			
Ref. Des.	Data Element	Name	Attributes
IT101	350	Grainger Purchase Order Line Number	M AN 5/5
		NOTE: The IT101 must match the exact Grainger Purchase Order Line Number that was sent in the PO101 of the 850 for the item number being invoiced	
IT102	358	Quantity Invoiced	M R 1/10
IT103	355	Unit or Basis for Measurement Code	M ID 2/2
		NOTE: Unit of Measure Code must match the Unit of Measure Code sent in the PO103 segment from the 850	
IT104	212	Unit Price	M R 1/17
		NOTE: Grainger will only accept numeric values that represent 2 positions to the right of the decimal. For example: \$12.65 should be sent as 12.65	
IT106	235	Grainger Stock Number Qualifier	M ID 2/2
		CB Grainger Stock Number	
IT107	234	Grainger Stock Number	M AN 5/10
IT108	235	Vendor Item Number Qualifier	O ID 2/2
		VN Vendor's Item Number	
IT109	234	Vendor Item Number	O AN 1/35
IT110	235	Purchase Order Number Qualifier	M ID 2/2
		PO Purchase Order Number	
IT111	234	Grainger Purchase Order Number	M AN 10/10

Segment: **PID** **Product/Item Description**
Level: Detail
Usage: **Optional**
Purpose: To describe a product or process in coded or free-form format

Data Element Summary			
<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
PID01	349	Item Description Type	M ID 1/1
		Code indicating the format of a description	
		F Free-form	
PID05	352	Description	M AN 1/60
		A free-form description to clarify the related data elements and their content	

Segment: **TDS** Total Monetary Value Summary
Level: Summary
Usage: Mandatory
Purpose: To specify the total invoice amount

Data Element Summary

<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
TDS01	610	Amount	M N2 1/15
		Monetary amount	

NOTE: Grainger will only accept numeric values that represent 2 positions to the right of the decimal.

For example: \$12.65 should be sent as 1265

Segment: **SAC** Service or Charge Information

Level: Summary

Usage: **Optional**

Purpose: To request or identify a service or charge; to specify the amount for the service or charge

Data Element Summary

<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
SAC01	248	Charge Indicator Code which indicates a charge for the service specified C Charge	M ID 1/1
SAC02	1300	Service or Charge Code Code identifying the service or charge (these are the only codes we accept) D240 Freight F050 Other or Miscellaneous Charge	M ID 4/4
SAC05	610	Amount Monetary amount	M N2 1/15

**NOTE: Grainger will only accept numeric values that represent 2 positions to the right of the decimal.
For example: \$12.65 should be sent as 1265**

SAC15	352	Description A free-form description to clarify the related data elements and their content	M AN 1/80
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Segment: **TXI** Tax Information
Level: Summary
Usage: Optional
Purpose: To specify tax information

Data Element Summary			
<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
TXI01	963	Tax Type Code Code specifying the type of tax TX	M ID 2/2
TXI02	782	Monetary Amount Monetary amount	M R 1/18

NOTE: Grainger will only accept numeric values that represent 2 positions to the right of the decimal.
For example: \$12.65 should be sent as 12.65

Segment: **CTT** Transaction Totals
Level: Summary
Usage: Mandatory
Purpose: To transmit a hash total for a specific element in the transaction set

Data Element Summary			
<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
CTT01	354	Number of Line Items	M N0 1/6
		Total number of line items in the transaction set	

Segment: **SE** Transaction Set Trailer
Level: Summary
Usage: **Mandatory**
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)

Data Element Summary			
<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>Attributes</u>
<u>Des.</u>	<u>Element</u>		
SE01	96	Number of Included Segments	M N0 1/10
		Total number of segments included in a transaction set including ST and SE segments	
SE02	329	Transaction Set Control Number	M AN 4/9
		Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

Sample 810 Grainger Invoice

ISA*00* *00* *ZZ*SUPPLIER *ZZ*005103494 *060302*1900*U*00401*000000209*0*P*<~
GS*IN*SUPPLIER*005103494*20060302*1832*0001*X*004010~
ST*810*000000001~
BIG*20060301*123456789**4600000000***DR~
NTE*INV*FREE FORM MESSAGE~
REF*IA*SUPPLIER VENDOR NUMBER~ (i.e. 2000 + 4 digits)
N1*ST*GRAINGER SHIP TO*92*GRAINGER PLANT CODE~ (i.e. 001)
N2*ATTENTION NAME 1*ATTENTION NAME 2~
N3*SHIP TO ADDRESS 1*SHIP TO ADDRESS2~
N4*CITY*STATE*ZIPCODE*COUNTRY CODE~
DTM*011*20060301~
IT1*00001*10*EA*1.45**CB*GRAINGER STOCK NUMBER*VN*VENDOR ITEM
NUMBER*PO*4600000000~
PID*F****ITEM DESCRIPTION~
IT1*00002*10*EA*1.00**CB*GRAINGER STOCK NUMBER*VN*VENDOR ITEM
NUMBER*PO*4600000000~
PID*F**** ITEM DESCRIPTION~
TDS*21423~
SAC*C*D240***2572*****FREIGHT~
SAC*C*F050***786*****MISCELLANEOUS~
TXI*TX*10.15~
CTT*2~
SE*19*000000001~
GE*1*0001~
IEA*1*000000209~