



**Implementation Guidelines for AIAG (ANSI X12) EDI Conventions
Ship Notice/Manifest Transaction Set (856)
(2040 format)**

01/2012 - Version 3.0 - revised for multiple Magna divisions: Monterrey,
Muncie, Muncie East, Ramos, and Lansing.

ANSI X12 VERSION
RELEASE 02040

INTRODUCTION

This convention provides the standard format and establishes the data content of the Ship Notice/Manifest transaction within the context of an Electronic Data Interchange (EDI) environment. A Ship Notice/Manifest lists the contents of a shipment of goods as well as additional information relating to the shipment, such as order information, product description, physical characteristics, and type of packaging, marking, carrier information and configuration of goods within the transportation equipment. This transaction set enables the sender to describe the contents and configuration of a shipment in various levels of detail and provides an ordered flexibility to convey the information.

MAGNA uses the Ship Notice/Manifest as an Advance Ship Notice (ASN). Just-In-Time scheduling and short transit times require the supplier to transmit the ASN immediately when material leaves the shipping location to ensure the information is available to MAGNA material control before the material arrives.

Accuracy and timeliness of the ASN are vital to the operation of all MAGNA assembly plants. The Application Advice (824) highlights any discrepancies in the ASN information. The supplier must use this information to resolve the cause of discrepancies.

If corrections are needed, please contact the MAGNA buyer or follow up person. If MAGNA has not received the parts MAGNA can cancel the ASN and it can be resent. There are no "corrections" allowed. The entire ASN must be resent with the changes necessary

Per Audit requirements MAGNA has implemented new requirement for ASNs/Packing Slip/Invoice. The ASN number must match the Packing Slip and this number has to be referenced on the invoice. The vendor number assigned by MAGNA must appear on both the Packing Slip and invoice. Please include the PO number(s) on both the Packing Slip and on the invoice.

TABLE 1: DATA SEGMENT SEQUENCE FOR THE HEADING AREA

Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	MAGNA Use	Notes
ST	Transaction Set Header	M	1		YES	
BSN	Beginning Segment for Ship Notice	M	1		YES	
NTE	Note/Special Instructions	F	100		NO	
DTM	Date/Time Reference	O	10		YES	

SEGMENT:	ST - Transaction Set Header
LEVEL:	Heading
MAX USAGE/LOOPS:	1/None
PURPOSE:	To indicate the start of a transaction set and to assign a control number.
GENERAL INFORMATION:	The transaction set control number (ST02) in this header must match the transaction set control number (SE02) in the transaction set trailer (SE). This segment is mandatory.
EXAMPLE:	ST*856*0001

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
ST01	143	Transaction Set ID Code	M ID 03/03	YES	Use "856"
ST02	329	Transaction Set Control Number	M AN 04/09	YES	A unique control number assigned to each transaction set within a functional group. Same as SE02.

SEGMENT:	BSN - Beginning Segment for Ship Notice
LEVEL:	Heading
MAX USAGE/LOOPS:	1/None
PURPOSE:	To transmit identifying numbers, dates and other basic data relating to the transaction set.
GENERAL INFORMATION:	The date and time are the local date and time at the creation point of the transaction set. This should coincide with the shipment date and time.
EXAMPLE:	BSN*00*123456*881104*1200

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
BSN01	353	Transaction Set Purpose Code	M ID 02/02	YES	MAGNA use: "00" = Original
BSN02	396	Ship Identification	M AN 02/30 M AN 02/10	YES	A unique supplier-assigned Shipment Identification (SID) number that is not repeated. Although the standard allows for a 30 character SID number, MAGNA will only accept 10 characters.
BSN03	373	Date	M DT 06/06	YES	Local ASN Creation Date (YYMMDD)
BSN04	337	Time	M TM 04/04	YES	Local ASN Creation Time (HHMM) 24 hour clock.

SEGMENT :	DTM - Date/Time Reference
LEVEL :	Heading
MAX USAGE/LOOPS :	10/None
PURPOSE :	To specify pertinent dates and times
GENERAL INFORMATION :	One DTM segment in the heading area is mandatory to provide shipment, date and time. Use date and time shipment leaves supplier=s premises, with the supplier=s appropriate local Time Zone Qualifier.
EXAMPLE :	DTM*011*881104*1200*ET

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
DTM01	374	Date/Time Qualifier	M ID 03/03	YES	MAGNA use: "011" = Local date and time shipment leaves supplier's premises.
DTM02	373	Date	C DT 06/06 M DT 06/06	YES	Required by MAGNA (YYMMDD)
DTM03	337	Time	C TM 04/04 M TM 04/04	YES	Required by MAGNA. (HHMM) 24 Hour Clock. Any time is acceptable, with appropriate Time Zone Qualifier.
DTM04	623	Time Zone Qualifier	O ID 02/02 M ID 02/02	YES	MAGNA use: ET = Eastern Time CT = Central Time MT = Mountain Time PT = Pacific Time

During periods of Daylight Savings use:

ED = Eastern Daylight Time
CD = Central Daylight Time
MD = Mountain Daylight Time
PD = Pacific Daylight Time

For suppliers shipping from European locations use:

GM = Greenwich Mean Time (GMT) (England)

For other European locations use:

01 = GMT + 1 hour
02 = GMT + 2 hours
03 = GMT + 3 hours
04 = GMT + 4 hours

TABLE 2A: DATA SEGMENT SEQUENCE FOR THE DETAIL AREA -- SHIPMENT LEVEL

Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	MAGNA Use	Notes
HL	Hierarchical Level	M	1	HL/200000	YES	Comment A
LIN	Item Identification Detail	O	1		NO	
SN1	Item Detail (Shipment)	O	1		NO	
SLN	Sub-line Item Detail	O	100		NO	
PRF	Purchase Order Reference	O	1		NO	
PO4	Item Physical Details	O	1		NO	
PID	Product/Item Description	O	200		NO	
MEA	Measurements	O	40		YES	
PWK	Paperwork	O	25		NO	
PKG	Marking, Packaging, Loading	O	25		NO	
TD1	Carrier Details (Quantity and Weight)	O	20		YES	
TD5	Carrier Details (Routing Sequence/Transmit Time)	O	12		YES	
TD3	Carrier Details (Equipment)	O	10		YES	
TD4	Carrier Details (Special Handling/Hazardous Material)	O	5		NO	
REF	Reference Numbers	O	200		YES	
PER	Administrative Communications Contact	O	1		NO	
CLD	Load Detail	O	1	CLD/200	NO	
REF	Reference Numbers	O	200			

Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	MAGNA Use	Notes
MAN	Marks and Numbers	0	10		NO	
DTM	Date/Time Reference	0	10		NO	
FOB	F.O.B. Related Instructions	0	1		NO	
N1	Name	0	1	N1/4	YES	
N2	Additional Name Information	0	2		NO	
N3	Address Information	0	2		NO	
N4	Geographic Location	0	1		NO	
REF	Reference Numbers	0	12		NO	
PER	Administrative Communications Contact	0	3		NO	
FOB	F.O.B. Related Instructions	0	1		NO	
SDQ	Destination Quantity	0	50		NO	
ETD	Excess Transportation Detail	0	1		YES	
CUR	Currency	0	1		NO	
ITA	Allowance, Charge or Service	0	10		NO	
Comment A: The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.						

SEGMENT :	HL - Hierarchical Level
LEVEL :	Detail - First Segment in Each Hierarchical Level
MAX USAGE/LOOPS :	1/HL/200,000
PURPOSE :	To identify dependencies among and the content of hierarchically related groups of data segments.
GENERAL INFORMATION :	The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line item data to shipment data and packaging data to line item data. At least one occurrence of the HL loop is mandatory at both <u>Shipment</u> and <u>Order levels</u> .
EXAMPLE :	HL*1**S (Shipment Level - Mandatory)

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
HL01	628	Hierarchical ID Number	M AN 01/12	YES	"1" for the initial HL segment and incremented by 1 in each subsequent HL segment within the transaction set.
HL02	734	Hierarchical Parent ID	O AN 01/12	NO	Not used for shipment level but required for all other levels.
HL03	735	Hierarchical Level Code	M ID 01/02	YES	MAGNA Use: "S" = Shipment level
HL04	736	Hierarchical Child Code	O ID 01/01	NO	

SEGMENT:	MEA - Measurements
LEVEL:	Detail (Shipment Hierarchical Level)
MAX USAGE/LOOPS:	40/HL
PURPOSE:	To specify physical measurements including dimensions, tolerances, weights and counts.
GENERAL INFORMATION:	One MEA segment for gross weight and one MEA segment for net weight are required at the <u>Shipment level</u> . (Net weight is gross weight minus tare weight.)
EXAMPLE:	MEA*PD*G*34250*LB (Shipment level) MEA*PD*N*28000*LB (Shipment level)

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
MEA01	737	Measurement Reference ID Code	M ID 02/02	YES	General use: "PD" = Physical dimensions
MEA02	738	Measurement Dimension Qualifier	M ID 01/03 M ID 01/02	YES	MAGNA use: "G" = Gross weight (required) "N" = Net weight (required)
MEA03	739	Measurement Value	C R 01/10 M R 01/08	YES	Value referred to by MEA02.
MEA04	355	Unit of Measure	M ID 02/02	YES	Unit of Measure for MEA03. General Use: "LB" = Pounds
MEA05	740	Range Minimum	C R 01/10	NO	
MEA06	741	Range Maximum	C R 01/10	NO	

SEGMENT:	TD1 - Carrier Details (Quantity and Weight)
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LEVEL:	Detail (Shipment Hierarchical Level)
MAX USAGE/LOOPS:	20/HL
PURPOSE:	To specify the transportation details relative to commodity, weight, and quantity.
GENERAL INFORMATION:	Required at the <u>Shipment level</u> . The TD1 segment should match what is on the Bill of Lading. In case of mixed loads use "MIX90" in TD101 and the total number of containers (returnable and non-returnable) in TD102, e.g., 1 pallet + 2 boxes = 3 containers (MAGNA can only accept one TD1 segment per ASN).
EXAMPLE:	TD1*PLT71*2 TD1*MIX90*3 TD1*COL52*2

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
TD101	103	Packaging Code (Container Type)	O ID 05/05 M ID 05/05	YES *	Use an appropriate code. Some typical codes from the ANSI X12 Data Element Dictionary are: "BAG13" = Bag "BBL52" = Barrel "BIN51" = Wire Mesh Bin "BIN52" = Steel Bin "BOX25" = Cardboard Box "COL52" = Steel Coil "CRT71" = Crate "CTN25" = Cardboard Carton "LSE71" = Loose "MIX90" = Mixed "PLT71" = Pallet "RCK58" = Rack "SKD71" = Skid
* Pending Data Maintenance request at ANSI X12					
TD102	80	Lading Quantity (Container Quantity)	C NO 01/07 M NO 01/03	YES	Number of packages of type specified in TD101.
TD103	23	Commodity Code Qualifier	O ID 01/01	NO	
TD104	22	Commodity Code	C ID 01/10	NO	
TD105	79	Lading Description	O AN 01/25	NO	
TD106	187	Weight Qualifier	O ID 01/02	NO	
TD107	81	Weight	C R 01/08	NO	
TD108	355	Unit of Measurement Code	C ID 02/02	NO	

SEGMENT :	TD5 - Carrier Details (Routing Sequence/Transit Time)
LEVEL :	Detail (Shipment Hierarchical Level)
MAX USAGE /LOOPS :	12/HL
PURPOSE :	To specify the carrier and sequence of routing and to provide transit time information.
GENERAL INFORMATION :	<p>One TD5 segment is required at the Shipment level for each ASN (856).</p> <p>When multiple carriers are to be employed in the movement of material, specify the originating carrier (the carrier leaving the supplier's dock). If making a rail shipment other than through a consolidator, identify the railroad carrying the shipment.</p> <p>The mode of "PC" (Private Carrier) is only to be utilized when transportation service is provided by the supplier using their own equipment and the supplier does not submit a Freight Bill for payment of said service. If "PC" is used and the supplier does not have an assigned SCAC code, the supplier should insert the first four alphabetic characters of their company name. This is the only exception allowed with regard to the entry of SCAC codes.</p>
EXAMPLE :	<p>TD5*B*2*UPAC*M (Trailer Load)</p> <p>TD5*B*2*CETR*LT***PP*CP1122 (Less than Trailer Load -Consolidation)</p> <p>TD5*B*2*GTW*R (ail)</p> <p>TD5*B*2*EAFC*AE (Air Express)</p>

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
TD501	133	Routing Sequence Code	O ID 01/02 M ID 01/02	YES	MAGNA Use: "B" = Originating Carrier
TD502	66	ID Code Qualifier	C ID 01/02 M ID 01/02	YES	MAGNA Use: "2" = Standard Carrier Alphabetic Code (SCAC Code).
TD503	67	ID Code	C ID 02/17 M ID 02/04	YES	For TD502. Use carrier's SCAC code. (Contact Magna Division for current valid SCAC codes).
TD504	91	Transportation Method Code	C ID 01/02 M ID 01/02	YES * * * *	<p>MAGNA use:</p> <p>"AC" = Air Charter</p> <p>"AE" = Air Express</p> <p>"D" = Parcel Post</p> <p>"DD" = Dedicated Delivery Service</p> <p>"E" = Expedited Truck</p> <p>"GG" = Geographic Shipping/ Rcvng</p> <p>"GR" =Geographic Receiving</p> <p>"GS" = Geographic Shipping</p> <p>"LT" = Less than Trailer Load (LTL)</p> <p>"M" = Motor (Trailer Load)</p> <p>"O" = Containerized Ocean</p> <p>"PC" = Private Carrier (See</p>

ELEM ID	#	ELEM NAME	AIAG/MAGNA FEATURES	MAGNA USE	COMMENTS
				*	"General Information" for usage)
				*	"PD" = Parcel Delivery
					"R" = Rail
					"RR" = Roadrailer
					"U" = United Parcel Service (UPS)
					"VE" = Vessel
					"X" = Intermodal (TOFC/COFC)
* Pending Data Maintenance request at ANSI X12, code values not assigned.					
TD505	387	Routing	C AN 01/35	NO	
TD506	368	Ship/Order Status Code	O ID 02/02	NO	
TD507	309	Location Qualifier	O ID 01/02	YES	"PP" = Pool Point (for consolidation shipments).
TD508	310	Location Identifier	C AN 01/25 C AN 01/07	YES	(Contact Magna Division for list of current valid pool points).
TD509	731	Transit Direction Code	O ID 02/02	NO	
TD510	732	Transit Time Direction Qualifier	O ID 02/02	NO	
TD511	733	Transit Time	C R 01/04	NO	

SEGMENT :	TD3 - Carrier Details (Equipment)
LEVEL :	Detail (Shipment Hierarchical Level)
MAX USAGE/LOOPS :	12/HL
PURPOSE :	To specify transportation details relating to the equipment used by the carrier.
GENERAL INFORMATION :	<p>Only one TD3 segment is used per ASN (856) at the shipment level to state the identifying number of the trailer or railcar.</p> <p>When entering equipment numbers with alpha prefixes, place the alpha portion in TD302 and the numeric portion in TD303. For a rail shipment, use the railcar number in TD303 with the owner's prefix in TD302. For an air freight shipment, use the 2character airline code in TD302 and the flight number of the airline in TD303.</p>
EXAMPLE :	<p>TD3*TL**154268 (Trailer)</p> <p>TD3*RR*CR*12345678 (Rail)</p>

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
TD301	40	Equipment Description Code	M ID 02/02	YES	Use any acceptable code in the ANSI X12 Data Element Dictionary.
TD302	206	Equipment Initial	O AN 01/04	YES	The alphabetic portion of the equipment identification.
TD303	207	Equipment Number	C AN 01/10 M AN 01/10	YES	Required by MAGNA. The trailer or railcar in which the part or returnable container is shipped.
TD304	187	Weight Qualifier	O ID 01/02	NO	
TD305	81	Weight	C R 01/08	NO	
TD306	355	Unit of Measurement Code	C ID 02/02	NO	
TD307	102	Ownership Code	O ID 01/01	NO	

SEGMENT :	REF - Reference Numbers
LEVEL :	Detail (Shipment Hierarchical Level)
MAX USAGE /LOOPS :	200/HL
PURPOSE :	To transmit identifying numbers.

GENERAL INFORMATION :	<p>Although the standard allows up to 30 characters in reference numbers, MAGNA allows only 10 characters. Sending more than 10 characters in Bill of Lading numbers, Packing Slip numbers or Freight Bill numbers will result in ASNs being rejected. One REF segment is required at the <u>Shipment level</u> for the Bill of Lading number when shipping by surface carrier or Air bill number when shipping by air. Do not use more than 10 characters for Bill of Lading or Air bill number. If multiple parts with multiple packing slips are involved in a shipment to a single destination, only one Bill of Lading Number should be utilized to identify that material at the <u>Shipment level</u>. When parts on a single trailer are destined for multiple destinations and will pass through a consolidation center, a Master Bill of Lading must be created. The Master Bill of Lading number must be in a REF segment at the <u>Shipment level</u>. Detail Bill of Lading numbers are also required and must appear in REF segments at the <u>Order level</u>.</p> <p>One to four additional REF segments at the <u>Shipment level</u> for trailer or railcar seal numbers, if present. Do not use more than 8 characters for each seal number.</p> <p>One additional REF segment at the <u>Shipment level</u> for the Freight Bill number, if available. Do not use more than 16 characters for Freight Bill number.</p> <p>One REF segment is required at the <u>Shipment level</u> for Packing Slip (Shipper) if only one Packing Slip applies to the entire shipment. If there is more than one Packing Slip for a shipment, the REF segment is required at the <u>Order level</u> for each part number.</p> <p>Do not use more than 10 characters for the Packing Slip.</p> <p>The Bill of Lading number and Packing Slip number are not required if they are identical to the Shipper's Identification number (SID).</p> <p>A Shipper's Identifying Number (SID) cannot be duplicated.</p> <p>A Packing Slip Number cannot be duplicated.</p> <p>A Bill of Lading Number cannot be duplicated.</p> <p>All calculations (BSN 01 = "01") are for an entire ASN and do not use Reference Numbers in this segment.</p>
	<p>REF*BM*7374288</p> <p>REF*AW*01DTW123456</p> <p>REF*PK*34911 (note: PK should be same as ASN#)</p> <p>REF*SN*12345678</p> <p>REF*MB*123456</p> <p>REF*FR*A2113X</p>

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
REF01	128	Reference Number Qualifier	M ID 02/02	YES	MAGNA use: "AW" = Air bill Number "BM" = Bill of Lading number "FR" = Freight Bill number "MB" = Master Bill of Lading number "PK" = Packing Slip number "SN" = Seal Number
REF02	127	Reference Number	C AN 01/30 M AN 01/15	YES	Value referred to in REF01.
REF03	352	Description	C AN 01/80	NO	

NOTE: The same Bill of Lading and Packing Slip number cannot be reused. The MAGNA System will reject these.

SEGMENT :	N1 - Name
LEVEL :	Detail (Shipment Hierarchical Level)
MAX USAGE/ LOOPS :	1/N1/4/HL
PURPOSE :	To identify a party by type of organization, name and code.
GENERAL INFORMATION :	<p>Up to four N1 segments are used at the Shipment level. If all parts on the shipment are going to a single destination, put all four N1 segments in the Shipment level. If the shipment is going to multiple destinations, the Ship-To (ST) and Ultimate Destination (MA) N1 segments are put in the Order level with the appropriate part shown in the LIN segment.</p> <p>The "SU" and "SF" are always at the <u>Shipment level</u>. The "ST" and "MA" could be at the <u>shipment level</u> if shipping all items to one location, or at the <u>Order level</u> if shipping to multiple locations.</p> <p>Use "SU" for the MAGNA-assigned supplier code for which the Material Release (830) was issued. This should be the same code as transmitted in the N1 Loop in the 830 Heading level.</p> <p>Use "SF" for the actual Ship-From Location, even if the same as the "SU". If the 830 received from MAGNA does not specify an "SF" location, then the proper MAGNA code for the Ship-From location should be used. Contact your MAGNA Buyer.</p> <p>Use "ST" for the actual Ship-To location specified in the N1 Loop in the 830 Heading level.</p> <p>Use "MA" for the MAGNA receiving plant code of the ultimate destination, even if same as "ST". It is also specified in the N1 Loop in the 830 Heading level.</p> <p>These codes should echo the codes in the N1 segments in the heading and detail areas of the Material Release (830). Supplier code may contain an underscore character, which must be included to properly identify the supplier. If the codes are not correct on the Release, contact your buyer.</p>
EXAMPLE :	N1*SU**92*100123 N1*SF**92*100123 N1*ST**92*M100 N1*MA**92*M100

ELEM ID	#	ELEM NAME	AIAG/MAGNA FEATURES	MAGNA USE	COMMENTS
N101	98	Entity Identifier Code	M ID 02/02	YES	MAGNA use: "SU" = Released Supplier "SF" = Ship-From "ST" = Ship-To "MA" = Ultimate User (MAGNA plant)
N102	93	Name	C AN 01/35	NO	
N103	66	ID Code Qualifier	C ID 01/02 M ID 02/02	YES	MAGNA use: "92" = Buyer Assigned Code
N104	67	ID Code	C ID 02/17	YES	<p>If N101 = "SU", use the MAGNA-assigned supplier code of the released supplier.</p> <p>If N101 = "SF", use the MAGNA-assigned supplier code of the actual Ship-From location.</p> <p>If N101 = "ST", use the MAGNA assigned receiving plant code or the supplier code of the actual Ship-To location.</p> <p>IF N101 = "MA", use the MAGNA assigned ultimate destination receiving plant code.</p> <p>If N101 = "MA", "ST" this element would contain one of the following:</p> <p>"1136" = Monterrey Division "M100" = Ramos Division "1200" = Lansing Division "2037" = Muncie East Division "1600" = Muncie Division</p>

SEGMENT:	ETD - Excess Transportation Detail
LEVEL:	Detail (Shipment Hierarchical Level)
MAX USAGE/LOOPS:	1/HL
PURPOSE:	To specify information relating to premium transportation.
GENERAL INFORMATION:	P0304 - If either ETD03 or ETD04 is present, then the other is required. ETD03 qualifies the authorization number given in ETD04
EXAMPLE:	ETD*ZZ*S*AE*SR123456 (Shipment level) ETD*ZZ*A*AE*0672554 (Shipment level)

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
ETD01	626	Excess Transportation Reason Code	M ID 01/02	YES	MAGNA use: "ZZ"
ETD02	627	Excess Transportation Responsibility Code	M ID 01/01	YES	A - Customer Plant S - Supplier Authority
ETD03	128	Reference Identification Qualifier	X AN 02/03	YES	MAGNA use: "AE" Authorization for Expense (AFE) Number
ETD04	127	Reference Identification	X AN 01/30	YES	

SEGMENT :	HL - Hierarchical Level
LEVEL :	Detail (Tare Hierarchical Level)
MAX USAGE/LOOPS :	1/HL/1
PURPOSE :	To identify dependencies among and the content of hierarchically related groups of data segments.
GENERAL INFORMATION :	<p>The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line item data to shipment data and packaging data to line item data.</p> <p>The Tare level is used when a container is controlled by a Master or Mixed Load Bar-coded Label.</p> <p>MAGNA will use only one HL loop (one ASN is to be created with each shipment). This segment is not required with the initial implementation.</p>
EXAMPLE :	HL*2*1*T (Tare Level)

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
HL01	628	Hierarchical ID Number	M AN 01/12	YES	"1" for the initial HL segment and incremented by 1 in each subsequent HL segment within the transaction set.
HL02	734	Hierarchical Parent ID	O AN 01/12	YES	Required except for shipment level.
HL03	735	Hierarchical Level Code	M ID 01/02	YES	MAGNA Use: "T" = Tare level for container master or mixed-load label serial number.
HL04	736	Hierarchical Child Code	O ID 01/01	NO	

SEGMENT :	REF - Reference Numbers
LEVEL :	Detail (Tare Hierarchical Level)
MAX USAGE/LOOPS :	200/HL
PURPOSE :	To transmit identifying numbers.
GENERAL INFORMATION :	<p>One REF segment is required at the Tare level shipments for the Mixed Load or Master Bar-coded Label Serial Number. The maximum length of the serial number is 9 characters plus the 1 character Data Identifier for a maximum of 10 characters.</p> <p>The Mixed Load/Master Label Serial Number cannot be duplicated within a twelve month period.</p>
EXAMPLE :	REF*LS*G00006312 REF*LS*M00001234

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
REF01	128	Reference Number Qualifier	M ID 02/02	YES	MAGNA use: "LS" = Bar-Coded label Serial Number
REF02	127	Reference Number	C AN 01/30 M AN 01/16	YES	Value referred to in REF01.
REF03	352	Description	C AN 01/80	NO	

TABLE 2C: DATA SEGMENT SEQUENCE FOR THE DETAIL AREA -- ORDER LEVEL

Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	MAGNA Use	Notes
HL	Hierarchical Level	M	1	HL/200000	YES	Comment A
LIN	Item Identification Detail	O	1		YES	
SN1	Item Detail (Shipment)	O	1		YES	
SLN	Sub-line Item Detail	O	100		NO	
PRF	Purchase Order Reference	O	1		YES	
PO4	Item Physical Details	O	1		NO	
PID	Product/Item Description	O	200		NO	
MEA	Measurements	O	40		NO	
PWK	Paperwork	O	25		NO	
PKG	Marking, Packaging, Loading	O	25		NO	
TD1	Carrier Details (Quantity and Weight)	O	20		NO	
TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		NO	
TD3	Carrier Details (Equipment)	O	10		NO	
TD4	Carrier Details (Special Handling/Hazardous Material)	O	5		NO	
REF	Reference Numbers	O	200		YES	
PER	Administrative Communications Contact	O	1		NO	
CLD	Load Detail	O	1	CLD/200	NO	
REF	Reference Numbers	O	200		NO	

Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	MAGNA Use	Notes
MAN	Marks and Numbers	0	10		NO	
DTM	Date/Time Reference	0	10		NO	
FOB	F.O.B. Related Instructions	0	1		NO	
N1	Name	0	1	N1/200	YES	
N2	Additional Name Information	0	2		NO	
N3	Address Information	0	2		NO	
N4	Geographic Location	0	1		NO	
REF	Reference Numbers	0	12		NO	
PER	Administrative Communications Contact	0	3		NO	
FOB	F.O.B. Related Instructions	0	1		NO	
SDQ	Destination Quantity	0	50		NO	
ETD	Excess Transportation Detail	0	1		NO	
CUR	Currency	0	1		NO	
ITA	Allowance, Charge or Service	0	10		NO	
<p>Comment A: The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.</p>						

SEGMENT :	HL - Hierarchical Level
LEVEL :	Detail (Order Each Hierarchical Level)
MAX USAGE/LOOPS :	1/HL/200,000
PURPOSE :	To identify dependencies among and the content of hierarchically related groups of data segments.
GENERAL INFORMATION :	<p>The HL segment is used to identify levels of detail information using a hierarchical structure, such as relating line item data to shipment data and packaging data to line item data.</p> <p>At least one occurrence of the HL loop is mandatory at <u>both Shipment and Order levels.</u></p> <p>Parts cannot be repeated within the same ASN, repeats will be rejected as a duplicate even if the quantity is different than the first.</p>
EXAMPLE :	HL*3*2*O (Order Level - - Mandatory)

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
HL01	628	Hierarchical ID Number	M AN 01/12	YES	"1" for the initial HL segment and incremented by 1 in each subsequent HL segment within the transaction set.
HL02	734	Hierarchical Parent ID	O AN 01/12	YES	Required except for shipment level.
HL03	735	Hierarchical Level Code	M ID 01/02	YES	MAGNA use: "O" = Order level (Required)
HL04	736	Hierarchical Child Code	O ID 01/01	NO	

SEGMENT:	LIN - Order Identification Detail
LEVEL:	Detail (Order Hierarchical Level)
MAX USAGE/ LOOPS:	1/HL
PURPOSE:	To specify basic order identification data.
GENERAL INFORMATION:	<p>There should be one LIN segment in each Order level. The LIN segment is used to identify the buyer's part number, the Returnable Container Part number and to cross-reference parts to returnable containers.</p> <p>The part number and engineering revision are to reflect those found on the Material Release (830) LIN Segment at the Detail level.</p> <p>If a returnable container is used, the Container Part number is required in the LIN segment for the released part, as well as in an additional LIN segment in its own Order level. Parts cannot be repeated within the same ASN, repeats will be rejected as a duplicate even if the quantity is different than the first.</p>
EXAMPLE:	<p>LIN**BP*05761192*EC*REL (Part Number only)</p> <p>LIN**BP*05761192*EC*REL*RC*0000CC10 (Part # with Returnable Container)</p> <p>LIN**RC*0000CC10 (Returnable Container Part Number)</p>

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
LIN01	350	Assigned Identification	O AN 01/06	NO	
LIN02	235	Product/Service ID Qualifier	M ID 02/02	YES	MAGNA use: "BP" = Buyer's part number. "RC" = Returnable container part number.
LIN03	234	Product/Service ID	M AN 01/30	YES	Use the MAGNA released part number or returnable container part number found on the Material Release.
LIN04	235	Product/Service ID Qualifier	O ID 02/02	YES	General use: "EC" = Engineering Change Level (Required for production parts).
LIN05	234	Product/Service ID	C AN 01/30 O AN 01/06	YES	Value referenced to in LIN04. General use: MAGNA requires 1 to 6 characters for Engineering Change Level to be echoed back on the ASN.
LIN06	235	Product/Service ID Qualifier	O ID 02/02	YES	General use: "RC" = Returnable container Part number (used only if LIN02 is "BP" and part is shipped in returnable container).
LIN07	234	Product Service ID	C AN 01/30	YES	Returnable Container Part number. (A separate LIN segment in another Order level for returnable container tracking is also required.)
LIN08 : : LIN31		NOTE →			LIN08 through LIN31 provide additional pairs of Product/Service ID Qualifier (235) and Product/Service ID (234).

SEGMENT:	SN1 - Order Detail (Shipment)
LEVEL:	Detail (Order Hierarchical Level)
MAX USAGE/LOOPS:	1/HL
PURPOSE:	To specify line item detail relative to shipment.
GENERAL INFORMATION:	Used to show quantity being shipped, unit of measure, and YTD cum shipped (adjusted for receiving discrepancies, but not returned material). Required at the Order level for all other materials.
EXAMPLE:	SN1**32949*EA*90097

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
SN101	350	Assigned Identification	O AN 01/06	NO	
SN102	382	Number of Units Shipped	M R 01/10	YES	Quantity shipped for the released part number referenced in the associated LIN segment.
SN103	355	Unit of Measurement Code	M ID 02/02	YES	For SN102 & SN104. Purchased parts unit of measure as shown on MAGNA Material Release, usually "EA". Make sure fluids or measurements by weight have correct UOM from release; it may be LB or other measurement.
SN104	646	Quantity Shipped to Date	O R 01/09	YES	Cumulative quantity shipped for the current model year, including the quantity in SN102.
SN105	330	Quantity Ordered	O R 01/09	NO	
SN106	355	Unit of Measurement	C ID 02/02	NO	
SN107	728	Returnable Container Load Make-up	O ID 01/02	NO	

SEGMENT :	PRF - Purchase Order Reference
LEVEL :	Detail (Order Hierarchical Level)
MAX USAGE/LOOPS :	1/HL
PURPOSE :	To provide reference to a specific purchase order.
GENERAL INFORMATION :	Used to show MAGNA Purchase Order number and amendments. Required at the Order level. Purchase Order number should be the same as that on the Material Release (830) LIN Segment at the Detail level.
EXAMPLE :	PRF*PR517243AA

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
PRF01	324	Purchase Order Number	M AN 01/22 M AN 01/13	YES	Purchase Order Number as shown on MAGNA Purchase Order. (Contact your Sales/Marketing dept.)
PRF02	328	Release Number	O AN 01/30	NO	
PRF03	327	Change Order Sequence Number	O AN 01/08	NO	
PRF04	323	Purchase Order Date	O DT 06/06	NO	
PRF05	350	Assigned Identification	O AN 01/06	NO	
PRF06	367	Contract Number	O AN 01/30 O AN 01/10	NO	

SEGMENT :	REF - Reference Numbers
LEVEL :	Detail (Order Hierarchical Level)
MAX USAGE/ LOOPS :	200/HL
PURPOSE :	To transmit identifying numbers for Bill of Lading, packing slip, Receiving Dock, and Line Feed (master location).
GENERAL INFORMATION :	<p>The MAGNA Receiving Dock and Line Feed (master location) should be the same values as those transmitted on the material release (REF segment in LIN loop).</p> <p>Although the standard allows up to 30 characters in reference numbers, MAGNA can only allow 10 characters in Bill of Lading numbers, Packing Slip numbers or Freight Bill numbers may result in ASNs being rejected.</p> <p>When parts on a single trailer are destined for multiple destinations and will pass through a consolidation center, a Master Bill of Lading must be created. The Master Bill of Lading number must be in a REF segment at the Shipment level. Detail Bill of Lading numbers are also required and must appear in REF segments at the Order level.</p> <p>If there is more than one Packing Slip for a shipment, the REF segment is required at the Order level for each part number. Do not use more than 10 characters for the Packing Slip.</p> <p>A Packing Slip Number cannot be duplicated. A Bill of Lading Number cannot be duplicated.</p> <p>-One at the <u>Shipment level</u> with the Bill of Lading number from the original ASN. -One at the <u>Shipment level</u> if only one Packing Slip applies to the entire shipment. If there is more than one Packing Slip for a shipment, a REF segment is required at the <u>Order level</u> for each part number.</p>
EXAMPLE :	REF*BM*7374288 REF*PK*34911 REF*DK*Dock1 REF*LF*MAGNA

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
REF01	128	Reference Number Qualifier	M ID 02/02	YES	MAGNA use: "BM" = Bill of Lading number "PK" = Packing Slip number "DK" = Dock Code "LF" = Line Feed (Master Location)
REF02	127	Reference Number	C AN 01/30 M AN 01/16	YES	Value referred to in REF01. Dock code and line feed should be the same as those on MAGNA Material Release.
REF03	352	Description	C AN 01/80	NO	

NOTE: Bill of Lading/Packing Slip number cannot be reused, will reject as duplicate.

Author: Joan Cooney	Issued by: Magna Powertrain	Version: 3.0
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SEGMENT :	N1 - Name
LEVEL :	Detail (Order Hierarchical Level)
MAX USAGE/ LOOPS :	1/N1/200/HL
PURPOSE :	To identify a party by type of organization, name and code.
GENERAL INFORMATION :	<p>Two N1 segments are used at the Order level for a particular part number if the shipment is going to multiple destinations. The Ship-To and Ultimate Destination N1 segments are put in the Order Level with the appropriate part shown in the LIN segment.</p> <p>Use "ST" for the actual Ship-To location specified on the Material Release.</p> <p>Use "MA" for the MAGNA receiving plant code of the ultimate destination, even if same as "ST".</p> <p>The "SU" and "SF" are always at the <u>Shipment level</u>. The "ST" and "MA" could be at the <u>Shipment level</u> if shipping all items to one location, or at the <u>Order level</u> if shipping to multiple locations.</p> <p>These codes should echo the codes in the N1 segments in the heading and detail areas of the Material Release (830). If the codes are not correct on the Release, contact your buyer.</p>
EXAMPLE :	<p>N1*ST**92*M100</p> <p>N1*MA**92*M100</p>

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
N101	98	Entity Identifier Code	M ID 02/02	YES	MAGNA use: "ST" = Ship-To "MA" = Ultimate User (MAGNA plant)
N102	93	Name	C AN 01/35	NO	
N103	66	ID Code Qualifier	C ID 01/02 M ID 02/02	YES	MAGNA use: "92" = Buyer Assigned Code
N104	67	ID Code	C ID 02/17	YES	<p>If N101 = "ST", use the MAGNA assigned receiving plant code or the supplier code of the actual Ship-to location.</p> <p>If N101 = "MA", use the MAGNA assigned ultimate destination receiving plant code.</p> <p>If N101 = "MA","ST" this element would contain one of the following:</p> <p>"1136" = Monterrey Division "1200" = Lansing Division "2037" = Muncie East Division "1600" = Muncie Division</p>

TABLE 2D: DATA SEGMENT SEQUENCE FOR THE DETAIL AREA -- ITEM LEVEL TABLE

***NOTE:** MAGNA does not use item level on 2040 format at this time, do not include on ASN

Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	MAGNA Use	Notes
HL	Hierarchical Level	M	1	N1/200000	NO	Comment A
LIN	Item Identification Detail	O	1		NO	
SN1	Item Detail (Shipment)	O	1		NO	
SLN	Sub-line Item Detail	O	100		NO	
PRF	Purchase Order Reference	O	1		NO	
PO4	Item Physical Details	O	1		NO	
PID	Product/Item Description	O	200		NO	
MEA	Measurements	O	40		NO	
PWK	Paperwork	O	25		NO	
PKG	Marking, Packaging, Loading	O	25		NO	
TD1	Carrier Details (Quantity and Weight)	O	20		NO	
TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		NO	
TD3	Carrier Details (Equipment)	O	10		NO	
TD4	Carrier Details (Special Handling/Hazardous Material)	O	5		NO	
REF	Reference Numbers	O	200		NO	
PER	Administrative Communications Contact	O	1		NO	
CLD	Load Detail	O	1	CLD/200	NO	
REF	Reference Numbers	O	200			

Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	MAGNA Use	Notes
MAN	Marks and Numbers	O	10		NO	
DTM	Date/Time Reference	O	10		NO	
FOB	F.O.B. Related Instructions	O	1		NO	
N1	Name	O	1	N1/200	NO	
N2	Additional Name Information	O	2		NO	
N3	Address Information	O	2		NO	
N4	Geographic Location	O	1		NO	
REF	Reference Numbers	O	12		NO	
PER	Administrative Communications Contact	O	3		NO	
FOB	F.O.B. Related Instructions	O	1		NO	
SDQ	Destination Quantity	O	50		NO	
ETD	Excess Transportation Detail	O	1		NO	
CUR	Currency	O	1		NO	
ITA	Allowance, Charge or Service	O	10		NO	
Comment A: The HL segment is the only mandatory segment within the HL loop, and by itself, the HL segment has no meaning.						

TABLE 3: DATA SEGMENT SEQUENCE FOR THE SUMMARY AREA

Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	MAGNA Use	Notes
CTT	Transaction Totals	M	1		YES	Note 1
SE	Transaction Set Trailer	M	1		YES	
Note 1: Number of line items (CTT01) is the accumulation of the number of HL segments.						

SEGMENT :	CTT - Transaction Totals
LEVEL :	Summary
MAX USAGE/LOOPS :	1/None
PURPOSE :	To transmit a total of Hierarchical Level segments.
GENERAL INFORMATION :	Used to provide the number of HL segments used in the ASN transmitted. This total is used to cross-check that the complete transaction set was received.
EXAMPLE :	CTT*4

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
CTT01	354	Number of Line Items	M NO 01/06	YES	Total number of HL segments.
CTT02	347	Hash Total	O R 01/10	NO	
CTT03	81	Weight	O R 01/08	NO	
CTT04	355	Unit of Measure Code	C ID 02/02	NO	
CTT05	183	Volume	O R 01/08	NO	
CTT06	355	Unit of Measure Code	C ID 02/02	NO	
CTT07	352	Description	O AN 01/80	NO	

SEGMENT:	SE - Transaction Set Trailer
LEVEL:	Summary
MAX USAGE/LOOPS:	1/None
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).
GENERAL INFORMATION:	The transaction set control number value in this trailer must match the same element value in the transaction set header (ST02).
EXAMPLE:	SE*51*0001

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
SE01	96	Number of Included Segments	M NO 01/06	YES	
SE02	329	Transaction Set Control Number	M AN 04/09	YES	Same as "ST02".