MAGNA

MAGNA POWERTRAIN

Material Release Transaction Set (830)
(2040 format)

INTRODUCTION

This convention provides the format and establishes the data contents of a planning schedule with release capability transaction set. The planning schedule with release capability transaction set provides for customary and established business practice relative to the transfer of forecasting/material release information between organizations.

Magna uses the Release as 1) a forecast with the buyer's authorization for the seller to commit to resources, such as labor or material, 2) and as an order release mechanism supported by such elements as period-to-date cumulative quantities, and ship/delivery patterns requirements that have been represented in "buckets," such as weekly or monthly.

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

ANSI X12 VERSION/
RELEASE 002040

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TABLE 1: DATA SEGMENT SEQUENCE FOR THE HEADING AREA TABLE

Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	MAGNA Use	Notes
ST	Transaction Set Header	M	1		YES	
BFR	Beginning Segment for Planning Schedule	M	1		YES	
NTE	Note/Special Instruction	O	100		NO	
CUR	Currency	O	1		NO	
REF	Reference Numbers	O	12		NO	
PER	Administrative Communications Contact	O	3		NO	
TAX	Sales Tax Reference	O	3		NO	
FOB	F.O.B. Related Instructions	O	1		NO	
N1	Name	O	1	N1/4	YES	
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	
CTP	Pricing Information	O	25		NO	
SSS	Special Services	O	25		NO	
CSH	Header Sale Condition	O	1		NO	
ITD	Terms of Sale/Deferred Terms of Sale	O	2		NO	
DTM	Date/Time Reference	O	10		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	

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Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	MAGNA Use	Notes
TD1	Carrier Details (Quantity and Weight)	O	2		NO	
TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		NO	
TD3	Carrier Details (Equipment)	O	10		NO	
TD4	Carrier Details (Special Handling/Hazardous Materials)	O	5		NO	
MAN	Marks and Numbers	O	10		NO	

SEGMENT:	ST - Transaction Set Header
LEVEL:	Heading
MAX USAGE/LOOPS:	1/None
PURPOSE:	To indicate the beginning 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).
EXAMPLE:	ST*830*994091616

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
ST01	143	Transaction Set ID Code	M ID 03/03	YES	Use "830" for Planning Schedule with Release Capability.
ST02	329	Transaction Set Control Number	M AN 04/09 M AN 09/09	YES	Magna use: a unique control number (same as SE02).

SEGMENT:	BFR - Beginning Segment (Forecast/Material Release)
LEVEL:	Heading
MAX USAGE/LOOPS:	1/None
PURPOSE:	To indicate the beginning of a delivery based planning schedule transaction set and related forecast dates.
GENERAL INFORMATION:	Element BFR04 indicates the planning schedule is delivery based.
EXAMPLE:	BFR*05**5678*SH*A*910731*910930*910826

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
BFR01	353	Transaction Set Purpose Code	M ID 02/02	YES	Magna use: "05" = Replace.
BFR02	127	Forecast Order Number	C AN 01/30	NO	
BFR03	328	Release Number	C AN 01/30 M AN 01/04	YES	Sequence Number.
BFR04	675	Forecast Type Qualifier	M ID 02/02	YES	Magna use: "SH" for all versions.
BFR05	676	Forecast Quantity Qualifier	M ID 01/01	YES	Magna use: "A" = actual discrete quantities
BFR06	373	Forecast Horizon Start	M DT 06/06	YES	Horizon start date: the date when the forecast horizon (envelope) begins in YYMMDD format.
BFR07	373	Forecast Horizon End	M DT 06/06	YES	Horizon end date: the date when the forecast horizon (envelope) ends in YYMMDD format.
BFR08	373	Forecast Generation Date	M DT 06/06	YES	The forecast issue date in YYMMDD format.
BFR09	373	Forecast Updated Date	C DT 06/06	NO	
BFR10	367	Contract Number	O AN 01/30	NO	
BFR11	324	Purchase Order Number	O AN 01/22	NO	

SEGMENT:	N1 – Name
LEVEL:	Heading
MAX USAGE/LOOPS:	1/N1/4
PURPOSE:	To identify a party by type of organization, name, and code.
GENERAL INFORMATION:	The N1 loop in the heading area is used to identify the release issuer ship to plant and the supplier. Up to four N1 loops are defined, however, SF will not always be transmitted.
EXAMPLE:	N1*MI**92*M100 N1*SU**92*100232 N1*SU*92*ABC_NOVI

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
N101	98	Organization Identifier	M ID 02/02	YES	Magna use: "MI" = Material Release Issuer "SF" = Ship From "ST" = Ship To "SU" = Supplier/Manufacturer receiving release.
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" = Assigned by Buyer
N104	67	ID Code	C ID 02/17		Magna use: If N101 = "MI" or "ST" this element would contain one of the following: "1136" = Monterrey Division "M100" = Ramos Division "1200" = Lansing Division "2037" = Muncie East Division "1600" = Muncie Division If N101 = "SU" or "SF" this element would contain the Magna assigned supplier code.

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2: DATA SEGMENT SEQUENCE FOR THE DETAIL AREA

Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	MAGNA Use	Notes
LIN	Item Identification Detail	M	1	LIN/10000	YES	
NTE	Note	O	1		NO	
UIT	Unit Detail	M	1		YES	
CUR	Currency	O	1		NO	
SLN	Subline Item Detail	O	1	SLN/100	NO	
PID	Product/Item Description	O	1000		NO	
PO3	Additional Item Detail	O	25		NO	
CTP	Pricing Information	O	25		NO	
PID	Product/Item Description	O	1000		NO	
MEA	Measurements	O	40		NO	
PWK	Paperwork	O	25		NO	
PKG	Marking, Packaging, Loading	O	25		NO	
PO4	Item Physical Details	O	1		NO	
PRS	Part Release Status	O	1		NO	
REF	Reference Numbers	O	12		YES	
PER	Administrative Communications Contact	O	3		YES	
SSS	Special Services	O	25		NO	
ITA	Allowance, Charge or Service	O	10		NO	
ITD	Terms of Sale/Deferred Terms of Sale	O	2		NO	
TAX	Sales Tax Reference	O	3		NO	
FOB	F.O.B. Related Instructions	O	1		NO	
N1	Name	O	1	N1/3	YES	
N2	Additional Name Information	O	2		NO	
N3	Address Information	O	2		NO	
N4	Geographic Location	O	1		NO	

Seg. ID	Name	Req. Des.	Max. Use	Loop Repeat	MAGNA Use	Notes
REF	Reference Numbers	O	12		NO	
PER	Administrative Communications Contact	O	3		NO	
FOB	F.O.B. Related Instructions	O	1		NO	
FST	Forecast Schedule	O	260		NO	Note 1
SDP	Ship/Delivery Pattern	O	1	SDP/260	YES	
FST	Forecast Schedule	O	260		YES	
SDQ	Destination Quantity	O	50		NO	
ATH	Resource Authorization	O	20		YES	
SHP	Shipped/Received Information	O	1	SHP/25	YES	
REF	Reference Numbers	O	5		NO	
TD1	Carrier Detail (Quantity & Weight)	O	1		NO	
TD5	Carrier Details (Routing Sequence/Transit Time)	O	12		NO	
TD3	Carrier Details (Equipment)	O	10		NO	
TD4	Carrier Details (Special Handling/Hazardous Materials)	O	5		NO	
MAN	Marks and Numbers	O	10		NO	

Note 1: At least one occurrence of segment FST is required, either as a stand-alone segment or within the SDP loop.

SEGMENT:	LIN - Item Identification Detail
LEVEL:	Detail
MAX USAGE/LOOPS:	1/LIN/10,000
PURPOSE:	To specify basic item identification data.
GENERAL INFORMATION:	This segment is used for part number information. The Magna part number and engineering revision should be returned on the 856 LIN segment at the Order hierarchical level. The purchase order number should be returned on the 856 PRF segment at the Order hierarchical level.
EXAMPLE:	LIN**BP*05003670*PO*277634

LEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
LIN01	350	Assigned Identification	O AN 01/06	NO	
LIN02	235	Product ID Qualifier	M ID 02/02	YES	Magna use: "BP" = Buyer=s Part Number
LIN03	234	Product ID	M AN 01/30	YES	Magna's Part Number
LIN04	235	Product ID Qualifier	O ID 02/02 M ID 02/02	YES	Magna use: "PO" = Purchase Order Number
LIN05	234	Product ID	C AN 01/30 M ID 01/13	YES	Magna use: The purchase order number.
LIN06	235	Product ID Qualitative	O ID 02/02	YES	Magna use: "EC" = Engineering Change Level
LIN07	234	Product ID	C AN 01/30 C AN 01/06	YES	Magna use: The Engineering Change (Revision) number.

SEGMENT:	UIT - Unit Detail
LEVEL:	Detail
MAX USAGE/LOOPS:	1/LIN
PURPOSE:	To specify item unit data.
GENERAL INFORMATION:	This segment indicates the unit of measure for all quantities relating to the line item.
EXAMPLE:	UIT*EA (General Use)

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
UIT01	355	Unit of Measure Code	M ID 02/02	YES	General use: usually "EA" = Each
UIT02	212	Unit Price	C R 01/14	NO	
UIT03	639	Basis Unit Price Code	O ID 02/02	NO	

SEGMENT:	REF - Reference Numbers
LEVEL:	Detail
MAX USAGE/LOOPS:	12/LIN
PURPOSE:	To transmit identifying numbers associated with the named party.
GENERAL INFORMATION:	Used in this context to identify the receiving dock, or line feed (Master Location). The Dock Code is the code identifying the dock. This part is to be unloaded at the plant specified. The line feed must be returned on the 856 transaction under the HL loop in the Order hierarchical level.
EXAMPLE:	REF*DK*MAIN REF*LF*001

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
REF01	128	Reference Number Qualifier	M ID 02/02	YES	Magna use: "DK" = dock code "LF" = line feed
REF02	127	Reference number	C AN 01/30 M AN 01/05	YES	The Magna assigned name. DOC Code is a maximum of 5 characters. Line Feed is a maximum of 3 characters.
REF03	352	Description	C AN 01/80	NO	

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SEGMENT:	PER - Administrative Communications Contact
LEVEL:	Detail
MAX USAGE/LOOPS:	3/LIN
PURPOSE:	To identify a person or office to whom administrative communications should be directed.
GENERAL INFORMATION:	This segment is used to convey information about the contact person.
EXAMPLE:	PER*EX*CONTACT USING PLANT*TE*3139565741 PER*EX*JOHN SMITH*TE*3135551107

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
PER01	366	Contact Function Code	M ID 02/02	YES	Magna use: "EX" = Expeditor
PER02	93	Name	O AN 01/35 M AN 01/19	YES	Magna use: The name of the contact person
PER03	365	Communication Number Qualifier	O ID 02/02 M ID 02/02	YES	Magna use: "TE" = Telephone number
PER04	364	Communication Number	C AN 07/21 M AN 10/10	YES	Magna use: The telephone number of the contact person
PER05	326	Request Reference Number	O AN 01/45	NO	

SEGMENT:	N1 - Name
LEVEL:	Detail
MAX USAGE/LOOPS:	1/N1/3/LIN
PURPOSE:	To identify a party by type of organization, name, and code. Up to three detail level N1 loops are used on an exception basis to override header level N1. Both MA and ST will be transmitted, even if the same.
GENERAL INFORMATION:	The N1 loop in the detail area is used to identify physical locations for Ship-From, Ship-To, and the MAGNA plant for which the material is ultimately intended. The Ship-From location may be the same as the supplier to whom the Release is sent. The Ship-To location will usually be the MAGNA plant, but may be a consignee location. These values must be echoed back to MAGNA in the ASN (856). If these codes are not accurate, contact your buyer.
EXAMPLE:	N1*SF**92*71765A N1*ST**92*M100 (MAGNA Ramos Mexico plant) N1*MA**92*M100 – or – N1*SF**92*71765A N1*ST**92*12452A (Consignee location) N1*MA**92*M100

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
N101	98	Organization Identifier	M ID 02/02	YES	MAGNA use: "SF" = Ship-From location "ST" = Ship-To location "MA" = Ultimate Destination (MAGNA plant).
N102	93	Name	C AN 01/35	YES	
N103	66	ID Code Qualifier	C ID 01/02 M ID 02/02	YES	MAGNA use: "92" = Assigned by buyer
N104	67	ID Code	C ID 02/17	YES	MAGNA use: **IF N101 = "ST"**, either Magna receiving plant code or supplier code of the consignment location. **If N101 = "SF"**, supplier code of the shipping location. **If N101 = "MA"**, MAGNA receiving plant code. **If N101 = "MI" or "ST"** this element would contain one of the following: "1136" = Monterrey Division "M100" = Ramos Division "1200" = "Lansing Division "2037" = "Muncie East Division "1600" = Muncie Division

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SEGMENT:	SDP - Ship/Delivery Pattern
LEVEL:	Detail
MAX USAGE/LOOPS:	1/SDP/260/LIN
PURPOSE:	To identify specific ship/delivery requirements.
GENERAL INFORMATION:	This segment specifies what day of the week and/or a time frame during the day that a shipment is to be made.
EXAMPLE:	SDP*Y*Y (no pattern) SDP*1*G (ship once a month - 1st week, any shift) SDP*D*G (ship weekly - Monday, any shift)

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
SPD01	678	Ship/Delivery Pattern Code	M ID 01/02 M ID 01/01	YES	Use the ANSI X12 code for this element. If no specific Ship/Delivery pattern information is to be conveyed, a code of "Y" = None will be used. See the ANSI/X12 Data Dictionary for valid codes and their meanings.
SDP02	679	Ship/Delivery Pattern Time Code	M ID 01/02 M ID 01/01	YES	Magna use: This code is used only when specific ship/delivery information is being passed. When SDP01 = "Y", SDP02 will also contain "Y" = None.

Note: SDP03 through SDP08 provide 3 additional pairs of Ship/Delivery Pattern (678) and Ship/Delivery Pattern time (679). **Not used by Magna**.

SEGMENT:	FST - Forecast Schedule
LEVEL:	Detail
MAX USAGE/LOOPS:	260/SDP
PURPOSE:	To specify the forecasted dates and quantities.
GENERAL INFORMATION:	If FST03 = "D", the date specified in FST04 will take precedence over value in SDP01. As qualified by FST03, FST04 represents either a discrete forecast date, the first date of a forecasted bucket, or the first date of a flexible interval. If FST02 = "A", immediate, the quantity is past due (due before the date in BFR06). The first forecasted bucket quantity does not include the past due quantity.
EXAMPLE:	FST*1366*C*W*900926 FST*12100*C*F*910301*910331

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
FST01	380	Quantity	M R 01/10 M R 01/08	YES	The actual discrete quantity
FST02	680	Forecast Qualifier	M ID 01/01	YES	Magna use: "A" = Immediate "C" = Firm "D" = Planning
FST03	681	Forecast Timing Qualifier	M ID 01/01	YES	Magna USE: "W" = Weekly "D" = Discrete "F" = Flexible "M" = Monthly
FST04	373	Date	M DT 06/06	YES	General use in YYMMDD format: If FST03 = "D", the date the quantity is due. If FST03 = "F", the first day of the order period. If FST03 = "M", the first Monday date of the month the quantity is due. If FST03 = "W", the Monday date of the week the quantity is due.
FST05	373	Date	O DT 06/06	YES	If FST03 = "F", last day of the order period in YYMMDD format.
FST06	374	Date/Time Qualifier	O ID 03/03	NO	
FST07	337	Time	C TM 04/04	NO	
FST08	128	Reference Number Qualifier	O ID 02/02	NO	
FST09	127	Reference Number	C AN 01/30	NO	

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SEGMENT:	ATH - Resource Authorization
LEVEL:	Detail
MAX USAGE/LOOPS:	20/LIN
PURPOSE:	To specify resource authorizations (i.e., finished labor, material, etc.) in the Planning Schedule.
GENERAL INFORMATION:	One ATH segment with a "PQ" qualifier will be used for each Ship To location with the cumulative quantity required for prior to the first scheduled period for that location. Two additional ATH segments within the plant/model year loop will show the FAB (FI) Raw Material (MT) requirements for all locations on the release. The quantity fields in this segment are always cumulative quantities.
EXAMPLE:	ATH*PQ*910731*241511**870814 ATH*FI**724573**860101 ATH*MT**821654**860101

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
ATH01	672	Resource Authorization Qualifier	M ID 02/02	YES	Magna use: "PQ" Cumulative quantity required prior to first schedule period.
ATH02	373	Date	C DT 06/06	YES	Required if ATH01 = "PQ". This date is the same as BFR06.
ATH03	380	Quantity	C R 01/10 M R 01/08	YES	If ATH01 = "PQ", cumulative quantity that has been authorized from the Model Year start date (ATH05) to, but not including, end date (ATH02). If ATH01 = "FI", sum total of "FAB" authorization for all Ultimate Destination locations within this part/model year loop. If ATH01 = "MT", sum total of "RAW" authorization for all Ultimate Destinations within this part/model year loop.
ATH04	380	Quantity	O R 01/10	NO	
ATH05	373	Date	C DT 06/06 M DT 06/06	YES	Required if ATH03 is used. If ATH01 = "FI" or "MT", the "Beginning Model Year Date" for any Ultimate Destination within this part/model year loop.

SEGMENT:	SHP - Shipped/Received Information
LEVEL:	Detail
MAX USAGE/LOOPS:	1/SHP/25/LIN
PURPOSE:	To specify shipment and/or receipt information.
GENERAL INFORMATION:	This segment is used to give information on either the last shipment received/shipped or the cumulative quantity (CQ) received/shipped to date.
EXAMPLE:	SHP*01*856*050*900819 SHP*02*12384*051*900131**900819

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
SHP01	673	Quantity Qualifier	O ID 02/02 M ID 02/02	YES	Magna use: "01" = Discrete Quantity (received quantity) "02" = Cum Quantity (received qty.)
SHP02	380	Quantity	C R 01/10 M R 01/08	YES	For SHP01
SHP03	374	Date/Time Qualifier	O ID 03/03 M ID 03/03	YES	Magna use: If SHP01 = "01", use Received on This Date/Time If SHP01 = "02", use "051" = Cum Quantity Start Date.
SHP04	373	Date	C DT 06/06 M DT 06/06	YES	If SHP01 = "01", this is "Magna Last Received Date" If SHP01 = "02", this is "Beginning Inventory Date" for this Ultimate Destination.
SHP05	337	Time	O TM 04/04	NO	
SHP06	373	Date	C DT 06/06	YES	Only used if SHP01 = "2", then this is the Last Received date.
SHP07	337	Time	O TM 04/04	NO	

SEGMENT:	CTT - Transaction Totals
LEVEL:	Summary
MAX USAGE/LOOPS:	1/None
PURPOSE:	To transmit hash totals for "LIN" segments and for the quantities appearing in element "FST01" within this transaction set.
GENERAL INFORMATION:	This segment allows the receiver to perform checks for completeness and correctness of this transaction set.
EXAMPLE:	CTT*15*298335 CTT*1*24000 (Primary Metals)

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
CTT01	354	Number of Line Items	M NO 01/06 M NO 01/04	YES	Total number of "LIN" segments.
CTT02	347	Hash Total	O R 01/10	YES	General use: The hash total of all quantities released (FST01).
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 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*372*994091616

ELEM ID	#	ELEM NAME	AIAG/ MAGNA FEATURES	MAGNA USE	COMMENTS
SE01	96	Number of Included Segments	M NO 01/06	YES	The total of all segments in the transaction set, including the "ST" and "SE" segments.
SE02	329	Transaction Set Control Number	M AN 04/09 M AN 09/09	YES	Same as "ST02".

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NOTES: