NORTH AMERICA CONTAINER LABEL REQUIREMENT STANDARDS

New BWI Data Matrix Label Introduction

As a requirement for continuous improvement, introduction of SAP Warehouse Management, driving forces from our customer base, lot management, and end to end traceability, further information within the barcode is needed. The system now demands more information be entered as well as strict label conformity to avoid relabeling at the receiving area. Many of our customers in the last few years have been migrating to a very similar label structure. All attempts have been made to adhere to, and draw from similarities of these labels, to minimize efforts from our suppliers. These changes are essential for us to remain cost competitive and to grow into and take advantage of newer time saving technologies.

The new label structure will enable the receiving dock to scan the master or single label data matrix which will then.

- Apply all critical supplier label information into the system.
- Find and pull up the ASN (Advanced Shipping Notification).
- Present the operator with all the material on the delivery.
- Verify completeness having scanned all the pallets.
- Upon scanning a master label all child labels will be loaded*

*It is critical that the child labels follow the structure and pattern specified. This prevents the need for scanning each individual tote or box on the pallet. It also prevents the supplier having to send complex multi-layered ASN's. You will not need to change your EDI mapping.

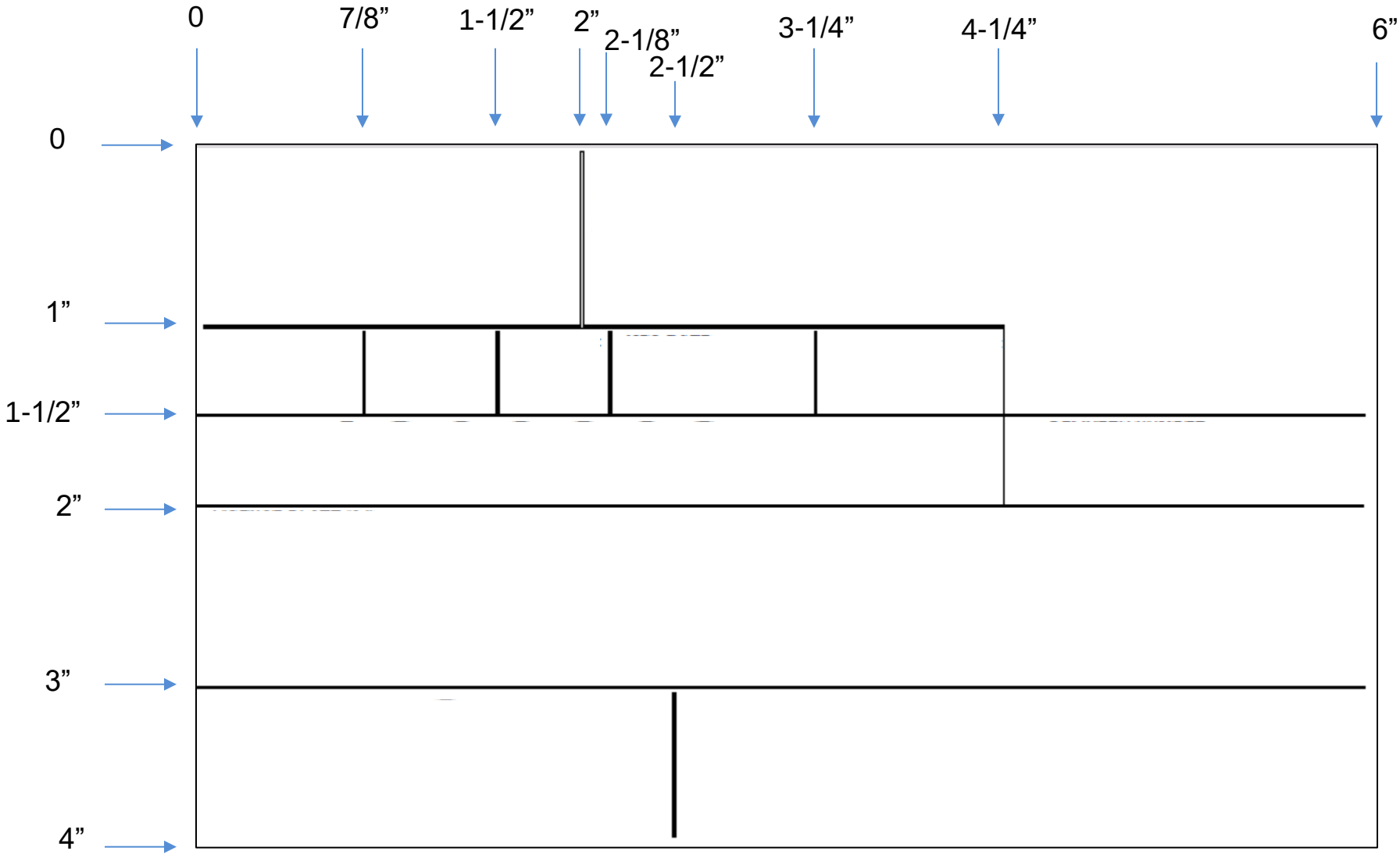
BWI Data Matrix Label Solutions

If you are using our supplier web solution “Active Orders” these label changes will be implemented there and readily available for you to use. Many of our suppliers readily create their own label solutions and have software to do so. A third App solution is being developed to enable printing to an Avery Label standard.

All suppliers must ensure that their labels meet our requirements and must be submitted for approval. To submit labels for approval or for any questions you may have please email me.

ridge.banston@bwigroup.com

Label Block Layout



Overall Label Dimensions – Approximately 4” High by 6” Wide.

Single Label Data Matrix Structure

Data Identifier	Qualifier	Data Content Field	Example	Total Field Max Length
1JUN		DUNS No + Serial No + Box No	1JUN831310037271607940001	25
N		Delivery Number	80941356	17
P		Part Number	22237538	19
7Q	GT	Gross Weight (rounded no decimals)	28	12
Q		Quantity In Container	35	13 up to 3 decimals
B		Container Number	TOTE	19
21L		BWI Plant Code	HU01	7
6D	094	Manufacturing Date (YYYYMMDDHHMMSS)	20181019214532	19
20L		Lot Number	20181001SOC1231	43
K		Purchase Order Number	5500005427	11

Example Scan of Single Label

[)><RS>06<GS>1JUN831310037271607940001<GS>N80941356<GS>P22237538<GS>7Q28GT<GS>Q35<GS>BTOTE<GS>21LHU01<GS>6D20180912133094<GS>20L201810011231<GS>K5500005420<RS><EOT>

- Data Format "06" = Dls
- Data Matrix Symbology Error Correction = ECC200
- []> = Message Header
- <RS> = Record Separator
- <GS> = Group Separator
- <EOT> Message Trailer

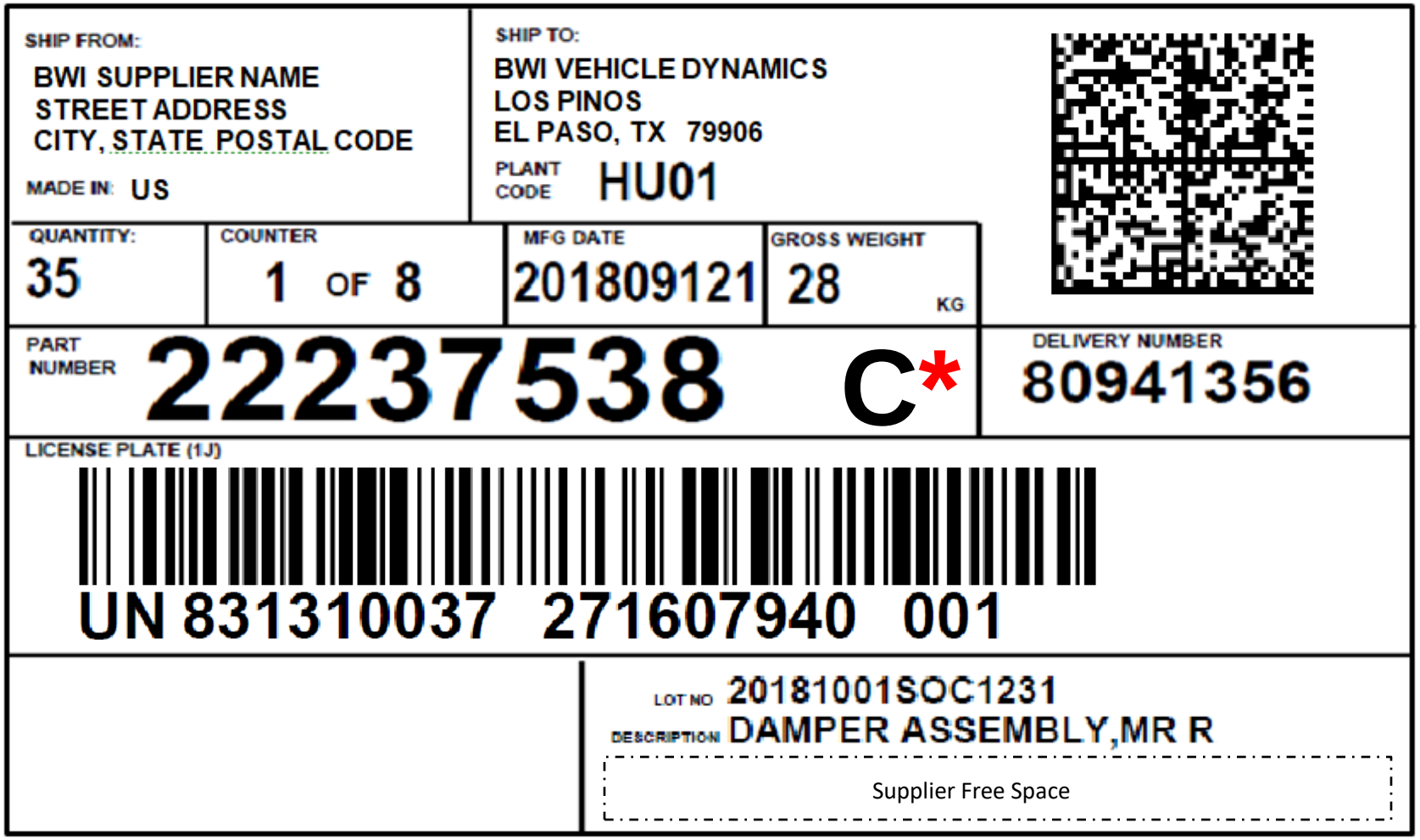
Single Label License Plate Structure

- Barcode using Code 128
- Barcode height should be minimum (0.5 Inch) or 15 mm
- Quite zone at each end of barcode should be minimum (0.25 Inch) or 6.3mm
- X-Dimension should be around 19.8 mil

1J – Data Identifier (hidden from human readable)
UN – ISO Assigning Authority assigned by Dun & Bradstreet
831310037 – Your Company DUNS number (9 digits 0 filled)
271607940 – Your serial number (9 Digits 0 filled) *
001 – Box number (3 digits zero filled) *

*Each pallet will have the same unique serial number throughout the master and the children. The last three digits make each tote or box unique and able to be scanned later when broken apart.

Single Label Example



*In the event a material is consigned a “C” goes here.

Master Label Data Matrix Structure

Data Identifier	Qualifier	Data Content Field	Example	Total Field Max Length
6JUN		DUNS No + Serial No + 000	6JUN831310037271607940000	25
N		Delivery Number	80941356	17
P		Part Number	22237538	19
7Q	PL	Total Pallet Quantity	280	16 up to 3 decimals
7Q	GT	Gross Weight (rounded no decimals)	28	12
7Q	PK	Number of Totes / Boxes	8	7
Q		Quantity In Each Tote / Box	35	13 up to 3 decimals
B		Container Number	PALLET	19
21L		BWI Plant Code	HU01	7
6D	094	Manufacturing Date (YYYYMMDDHHMMSS)	20181019224521	19
20L		Lot Number	20181001SOC1231	43
K		Purchase Order Number	5500005427	11

Example Scan of Master Label

[)><RS>06<GS>6JUN831310037271607940000<GS>N80941356<GS>P22237538<GS>7Q280PL<GS>7Q28GT<GS>7Q8PK<GS>Q35<GS>BPALLET<GS>21LHU01<GS>6D20180912133094<GS>20L20181001BCA005<GS>K55000054<RS><EOT>

- Data Format “06” = Dls
- Data Matrix Symbology Error Correction = ECC200
- []> = Message Header
- <RS> = Record Separator
- <GS> = Group Separator
- <EOT> Message Trailer

*It’s critical that the number of totes /boxes and the pieces per are accurate. Upon scanning the master data matrix all of the child labels will be constructed in the database based on this.

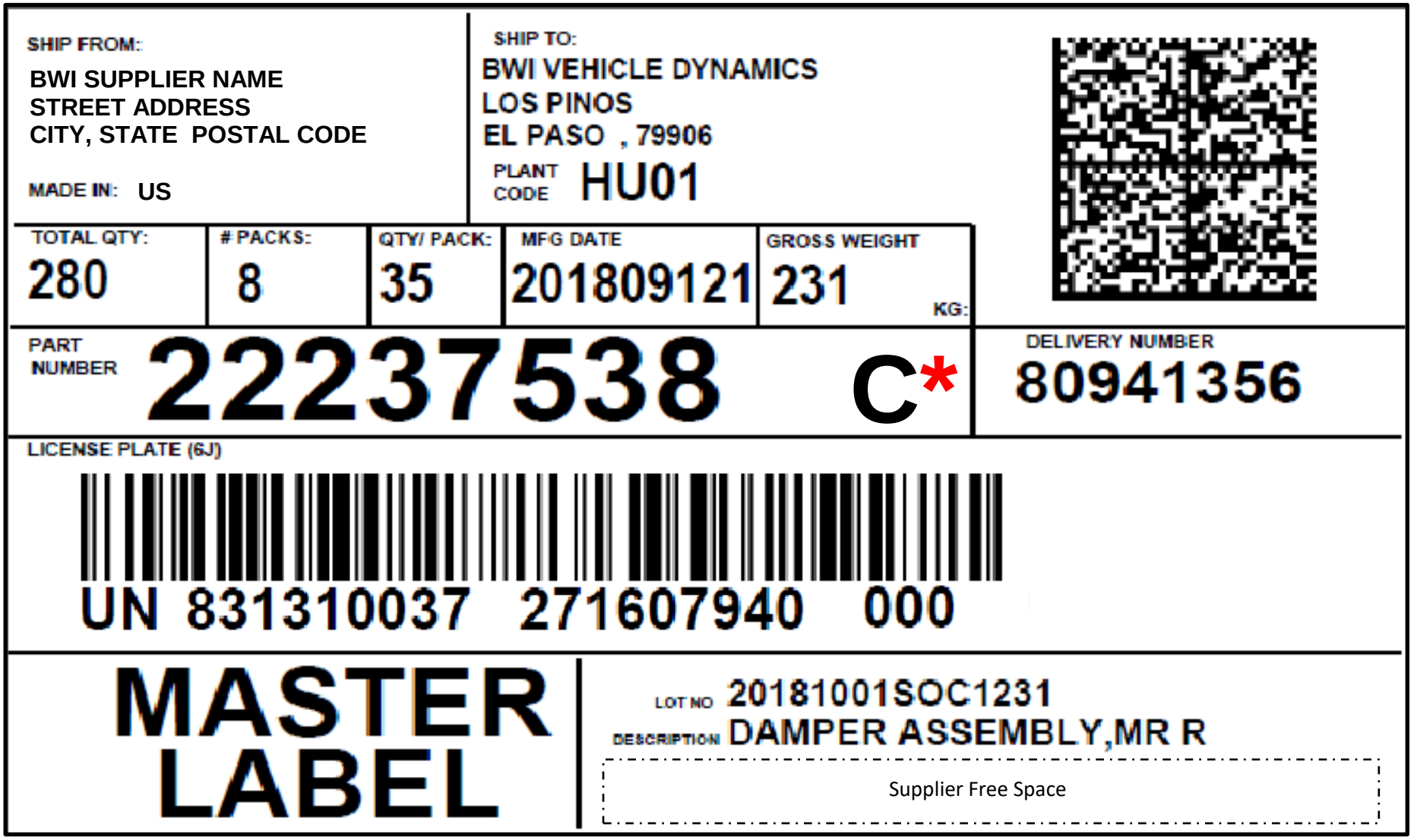
Master Label License Plate Structure

- Barcode using Code 128
- Barcode height should be minimum (0.5 Inch) or 15 mm
- Quite zone at each end of barcode should be minimum (0.25 Inch) or 6.3mm
- X-Dimension should be around 19.8 mil

6J – Data Identifier (hidden from human readable)
UN – ISO Assigning Authority assigned by Dun & Bradstreet
831310037 – Your Company DUNS number (9 digits 0 filled)
271607940 – Your serial number (9 Digits 0 filled) *
000 – Master or Highest Level (3 digits) *

*Each pallet will have the same unique serial number throughout the master and the children. The last three digits make each tote or box unique and able to be scanned later when broken apart. The Master or highest level is always 000.

Master Label Example



*In the event a material is consigned a “C” goes here.

Label to EDI Correlation

Label Field Name	EDI Field
Supplier DUNS No	NAD+SU
BWI Material Number	LIN
BWI Plant Code	NAD+ST
Purchase order number	RFF+ON

The EDI data fields shown can be found in both the DELFOR and DELJIT that is sent.

BGM+241+20100519153241+5
DTM+137:20100519:102
NAD+MI+831310037::16
NAD+SU+999999999::92 ←Supplier DUNS
NAD+SF+999999999::92
GIS+37
NAD+ST+HU01::92++BWI +++US ←BWI Plant Code
CTA+IC+:GARY BIDDLE
COM+01582815062:TE
LIN+++22239962:IN ← BWI Material Number
RFF+ON:5500000470 ←PO Number
RFF+RE:32
DTM+137:20100519:102
QTY+70:65240:C62
DTM+51:20090102:102
QTY+48:1680:C62
RFF+SI:86485201
DTM+11:20100518:102
SCC+1++F
QTY+1:2520:C62

Packaging Examples

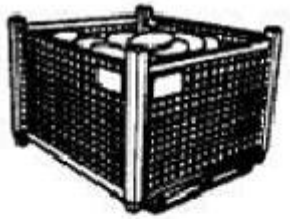
In the case of wire basket or wire mesh containers,

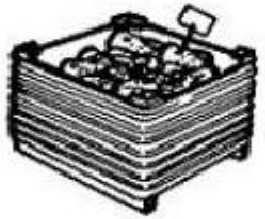
metal bins or tubs,

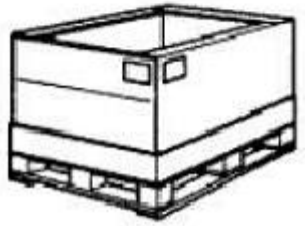
knock down pallet boxes,

or a single Box,

only one single label should be used.





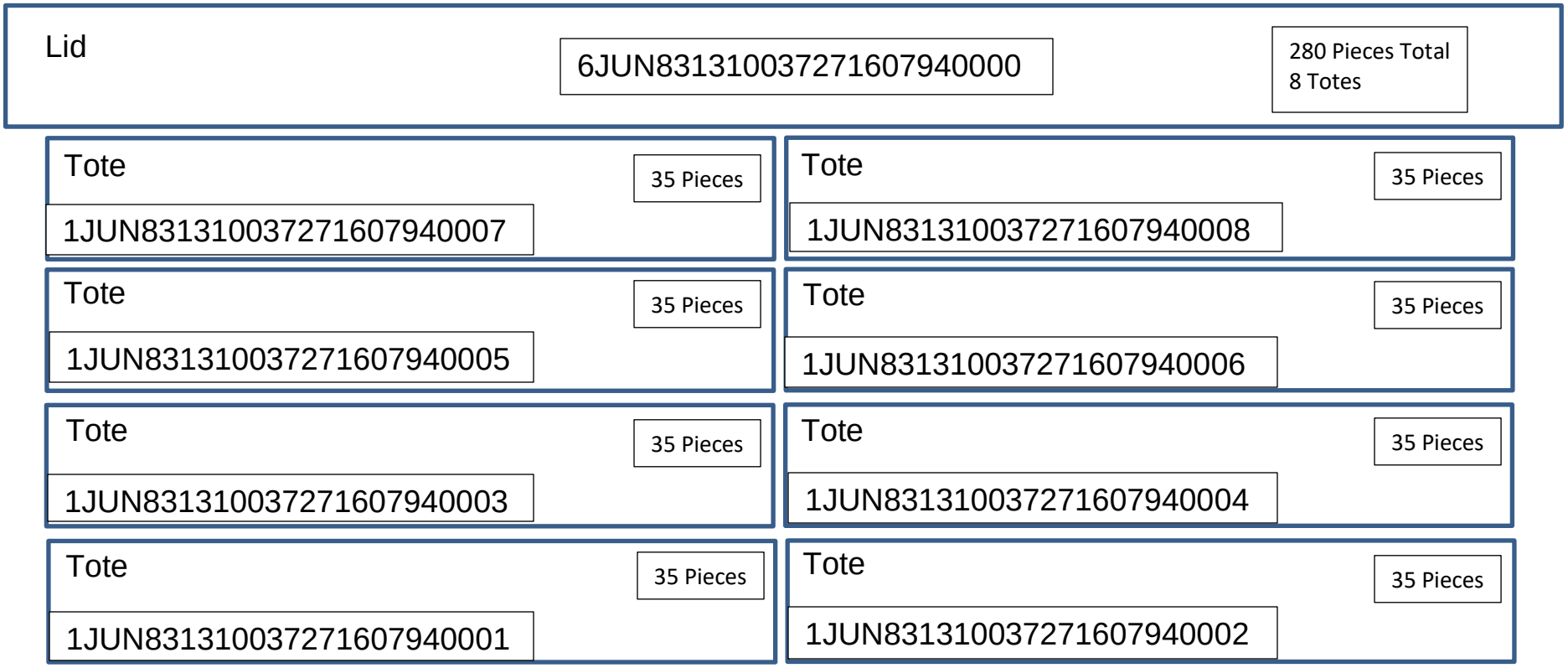


The last three digits on the License Plate in these cases

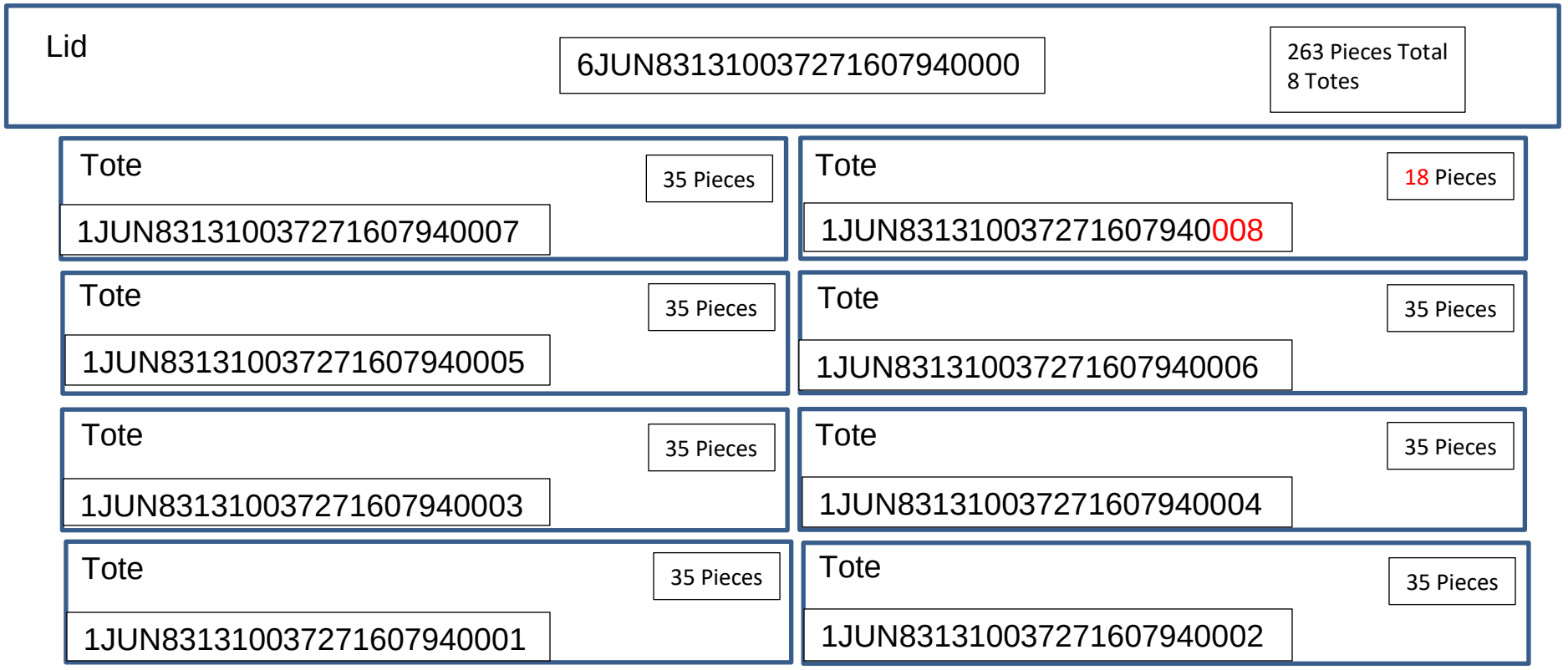
would be 000 and the License Plate would have a 1J prefix.

In the case of Master and Child labels they should look like the following example.

Just the License Plate scan value is shown for reference.



In the event that there is an odd quantity remaining or one tote is short the odd quantity must be in the last tote or box. In this case number 008. The program will scan the master label divide the total quantity sent by the number of boxes and check against the number per box sent 35. When this doesn't calculate out the program will assign the shorted amount in the one box to the last box.



BWI Plant Codes and Address

Plant Code	Name	Street	City	Region	Postal Code	Country
CZ01	BWI Czech Republic s.r.o	K Hradisti 168/4	Cheb		350 02	Czech Republic
DE01	BWI Germany	Stahlstrase 42-44	Russelsheim	Hessen	65428	Germany
FA01	BeijingWest Industries Co., Lt	Doudan Town, 85 Pu An Road	Beijing	Fangshan	102402	China
FR01	BWI France	167 rue de la Belle Etoile	Roissy-en-France	Val-d'Oise	95700	France
GF01	BWI Greenfield , Indiana , US	989 Opportunity Parkway	Greenfield	Indiana	46140	United States
H201	BWI North America Inc.	3100 Research Blvd.	Kettering	Ohio	45420	United States
HP01	BWI North America Direct Ship	3100 Research Blvd.	Kettering	Ohio	45420	United States
HU01	BWI North America Inc.	Los Pinos	El Paso	Texas	79906	United States
JP01	BWI CO. LTD - Japan		Tokyo	Tokyo	1000001	Japan
MP01	BWI Veh Dyn Sales/Service	Vialidad CH-P 8802, Colonia	Chihuahua	Chihuahua	31416	Mexico
MX01	BWI Veh Dyn Sales/Service	Vialidad CH-P 8802, Colonia	Chihuahua	Chihuahua	31416	Mexico
P001	BWI Poland Technologies sp.	Ul. Podgórki Tynieckie 2	Kraków	Malopolskie	30-399	Poland
P030	BWI Poland Technologies	Ul. Gen. Okulickiego 7	Krosno	Podkarpackie	38-400	Poland
SH01	BWI (Shanghai) Co. Ltd.	328 HuaJing Road	Shanhai	Shanghai	200131	China
U020	BWI UK Ltd.	60 Windmill Road	Luton	Bedfordshire	LU1 3XL	United Kingdom
US01	BWI Chassis dynamics NA INC.	Grand River Avenue	Brighton	Michigan	48116	United States
XT01	BWI(Shanghai)Co.Ltd XiangTan	Xiangtan City,Hunan Prov.	Xiangtan	Hunan	411100	China

Change Control

Date	Version	Changes	Reason
Oct 21st,2018	1.0	Original	New label format specifications for receiving with WMS and SAP.
Feb 6th, 2019	1.1	Box field extended to 3 places	Plant to go on WMS has some pallets > 99 totes.