

# Section 3 <Labeling and Shipping>

**Purpose:** Ensure incoming material is labeled properly with the correct part number and traceability to manufacturing.

**Note:** Product received with incorrect part number on the label causes considerable issues for our manufacturing lines and in many cases DENSO's OEM customers.



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### 1.0 Definitions

## **Definitions:**

**Manufacturing Line Side Labeling** – Process of apply DENSO Shipping Label to product at manufacturing line. This is preferred area to apply shipping label.

**Warehouse Labeling:** Process of apply DENSO Shipping Label in warehouse.

Manufacturing Electronic Confirmation: Process of using Computer program to validate that parts made in manufacturing match shipping tag.

**Warehouse Electronic Confirmation:** Process of using computer program to validate Supplier Label matches DENSO Label through scan confirmation.

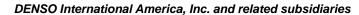
**Program Control Logic(PLC):** Manufacturing Computer program used to confirm parts match shipping label and automatic print DENSO Shipping Label.

**NASWEB:** DENSO Order Website for supplier to receive Purchase Orders, Label Formats, and send ASN(Advance Shipping Notices).

**Inspection Manuals**: Manual to confirm key quality check points for product quality inspection.

**Management Layered Audits:** Standard Audit system designed to ensure by several different levels of management that standardize processes are being followed.

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## 2.0 Supplier Labeling Policy Summary

Requirement: Each Supplier must pick a Labeling Level and maintain the requirement for that level. In the event the Supplier cannot manage the labeling correctly DENSO will require the supplier to move up a level.

#### <Supplier Labeling Levels>

	<u> </u>	
Level	Description	Details
1	Manufacturing Line Side Labeling (Electronic Confirmation)  = DENSO Preferred Level	Manufacturing PLC(program logic control) electronically verifies correct part # & Quantity which triggers DENSO label printing (one for one)
2	Manufacturing Line Side Labeling (Manual Confirmation)	DENSO Label is applied at the end of the production line with a double check.
3	Warehouse Labeling (Electronic Confirmation)	Scanning Confirmation between Supplier label and DENSO Label.
4	Warehouse Labeling (Manual Confirmation)  * = DENSO Minimum Level	Manual confirmation of Supplier and DENSO Label.

## <Overall Summary for Each Level>

Legend		Manufacturing Labeling		Warehouse Labeling	
Requirements O = Required, - = Not Required		Level 1 Electronic	Level 2 Manual	Level 3 Electronic	Level 4 Manual
Label Generation and Control		О	О	-	-
muf;	Start-up & Changeover Control	-	О	О	О
Manufacturing	Production Packing Log	-	О	О	О
ing	Quality Inspection- Part Matches Label	-	О	0	О
HW	Label Apply Process	NA	NA	O Electronic	O Manual
H	Quality Inspection – Part Matches Label	NA	NA	О	О
MG MT	Management Layered Process	-	О	О	О

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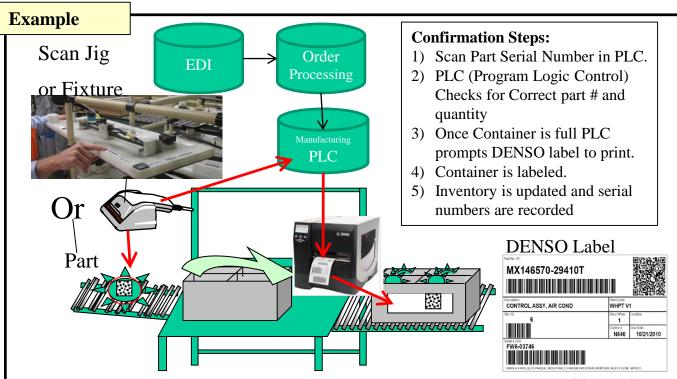
## 3.0 Level 1 Manufacturing Line Side Labeling Electronic Verification

## Level 1: Manufacturing Line Side Labeling (Electronic Confirmation)





#### 3.1 Level 1 Manufacturing Line Side Labeling Electronic Verification



#### From DENSO Label Spec

#### Benefits of Scanning of part label to generate shipping Label

- 1. Eliminates need for pre-printed labels and relabeling at shipping.
- 2. Shipping label is generated only after system confirms correct quantity and part #.

#### **Level 1 Requirements**

Item	Requirements
Label Generation and Control	1) Electronic Scan to generate shipping label 2) Electronic Traceability of label generation
Start up / Change Over / Rotation / Shift Change Verification	Special controls for new part runs are not required sir ols label generation.
Production / Packing	Inventory Management system with live updates     Scan at point of production to log serial
Inspection	Secondary inspection of label part number match actual part in container is not required.

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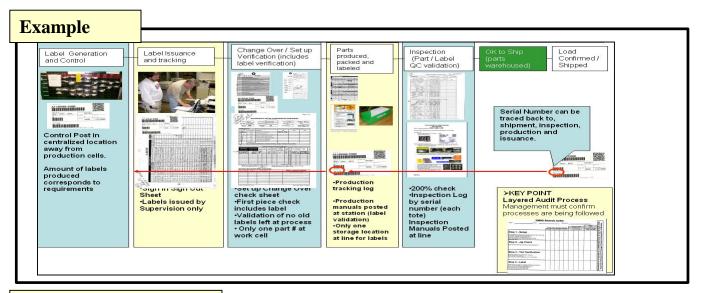


### 4.0 Level 2 Manufacturing Line Side Labeling Manual Verification

## Level 2: Manufacturing Line Side Labeling (Manual Confirmation)



### 4.1 Level 2 Manufacturing Line Side Labeling Manual Verification



#### **Level 2 Requirements**

Item	Requirements
Label Generation and Control	Labeling Sign-Out Log. Once Shipping Labels are generated from NASWEB a Sign-Out Log is utilized which is controlled by management to track the label issuing to manufacturing line. (See Example on Page 7)  Key Information on Sign-out Log. Part Number, Qty of Labels Issued, Ship Date, Associate that printed the labels, and issue to line date.
Start up / Change Over / Rotation / Shift Change Verification	Changeover Check Sheet Key Items: First piece check includes label matches actual part, Validation of no old labels left at process, and only one part # at work cell at a time. (Example Page 8)
Production / Packing	1) Production tracking log that tracks part number, lot number, production date, time, and DENSO Shipping Label serial number.  2) Production manuals posted at station which includes label validation.  3) Only one storage location at line for labels
Inspection	QC does 200% check which includes label validation and records result in inspection log by serial number (each tote) Inspection Manuals are posted at the line
Management Layered Audits	Key Point; Management must complete layered audits a minimum of one time per month to ensure processes are being followed.

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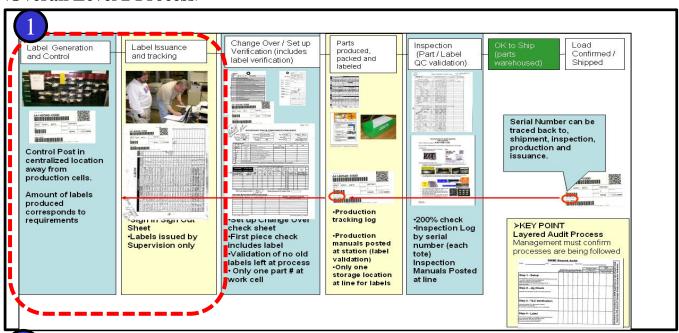




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### 4.2 Level 2 Manufacturing Line Side Labeling Manual Verification

#### <Overall Level 2 Process>



- 1 Step 1 Label Generation and Control> Level 2
- **Labeling Sign-Out Log.** Once Shipping Labels are generated from NASWEB a Sign-Out Log is utilized which is controlled by management to track the label issuing to manufacturing line.
- **Key Information on Sign-out Log**. Part Number, Qty of Labels Issued, Ship Date, Associate that printed the labels, and issue to line date. See Example Log Below.

**Purpose:** Create Controlled Label Printing and Distribution method of DENSO Labels to prevent extra or mixed labels delivered to production line.

Example: Labels Made and Verified									
	LABELS SIGN OUT								
Date	Who (Initial)	Ship Date	P/N on Labels	P/N on Route Card	Press	Beginning Serial #	Ending Serial #	Route Card Qty	Route Card Qty
25-May	МО	25-May	41170	41170	A4	2451832	2451836	5	5
25-May	JG	25-May	84846	84846	A14	2452037	2452042	6	6
25-May	JG	25-May	84850	84850	A14	2452044	2452049	6	6
25-May	МО	25-May	12200	12200	A15	2450473	2452479	7	7
25-May	SW	25-May	86320	86320	A6	2455239	2455252	14	14
25-May	SW	25-May	86330	86330	A6	2455254	2456225	14	14
25-May	SW	25-May	41170	41170	A4	2455871	2469989	5	5
25-May	SS	25-May	84860	84860	A14	2452051	2485333	3	3
25-May	SH	25-May	84870	84870	A14	2455278	2123653	6	6

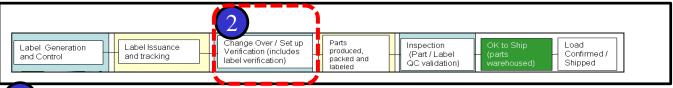
LABELS SIGN IN					
Qty Returned	Serial #(s) Returned	Who	Reason		
	-				



Part Number to Run

#### 4.3 Level 2 Manufacturing Line Side Labeling Manual Verification

#### <Overall Level 2 Process>



Step 2 Start Up/ Change Over/ Rotation/ Shift Change Verification> Level 2

Changeover Check Sheet Key Items:

**Purpose:** Ensure no Part Mixing occurs during changeover, rotation, and or Shift Change. Confirm label control is handled as part as changeover.

## Example

## Start Up, Change over, Rotation, and Shift Change Verification

AA125450-1010

	STEP/DUTY	Check Box
1)	Validate the labels issued for the parts scheduled to run. Also, ensure clean point prior to part/rotation/shift change.	Fred Simpson (9/18) 9:00 a.m.
2)	Check the log to confirm (and record supervision approval) that the process has been cleared of all old parts and old labels.	Fred Simpson (9/18) 9:00 a.m.
3)	Confirm that proper packaging and labeling manuals have been set up, and they match the scheduled job.	Fred Simpson (9/18) 9:00 a.m.
4)	Perform a first and last piece check to confirm and record received labels are for proper part numbers and the planned production quantity.	Fred Simpson (9/18) 9:00 a.m.

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#### 4.4 Level 2 Manufacturing Line Side Labeling Manual Verification

# Change Over / Set up Verification (includes label verification) Label Generation and Control Label Issuance and tracking Change Over / Set up Verification (includes label verification) Parts produced, produced, produced, produced, parts produced, parts produced, parts warehoused) Confirmed / Shipped Shipped

## 3 Step 3 Production and Packing Level 2

- Utilize Production tracking log that tracks part number, lot number, production date, time, and DENSO Shipping Label serial number.
- 2) Production manuals posted at station which includes label validation.
- 3) Only one storage location at line for labels

Purpose: Ensure no Part Mixing or wrong Label applied at final pack-out.

## **Step 4 Quality Inspection Level 2**

- 1) QC does 200% check which includes label validation and records result in inspection log by serial number for each tote. See example below
- 2) Inspection Manuals are posted at the line

**Purpose:** Ensure no wrong label applied by production and packing process

#### **EXAMPLE: FINAL PRODUCT VERIFICATION**

FINAL PRODUCT AUDIT LOG

#### TOOL #:

#### INTERNAL PART #:

LABEL SERIAL NUMBERS AUDITED (LAST 4 DIGITS EXCEPT WHEN WHOLE # CHABGES	100% Part and Label Verification	FINAL AUDITOR CLOCK	OP CLOCK NUMBER(S)	DATE	IF REJECT, CONTROL PLAN #	*NCPR#
00202582-2586		5713	8430	6-May		
2587-2590		5713	8430	6-May		
2591-2593		5713	8430	6-May		
2594		5713	8430	6-May		
2595	1ST	5713	8430	6-May		
2418552		5713	5747	6-May		
8553-8554		5713	5747	6-May		

## 5 Step 5 Management Layered Audits Level 2

**Key Point:** Management must complete layered audits to ensure processes are being followed. (Example Leader Check Frequency (Line Leader – 2 times per week, Supervisor (1 time per week), Plant Manager (1 time per month)

**Purpose:** Ensure by several different levels of management that standardize processes are being followed and are working well for the associates

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### 5.0 Level 3 Warehouse Labeling (Electronic Confirmation)

## Level 3: Warehouse Labeling (Electronic Confirmation)

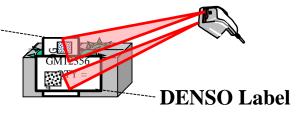


## 5.1 Level 3 Warehouse Labeling Electronic Confirmation

#### **Example**

## <Electronic Confirmation of Shipping Label Part Number>





#### <Manufacturing Labeling with Supplier Internal Tag>

Item	Requirements
Change Over or Start-up	Start up / Change Over / Rotation / Shift Change Verification *Changeover Check Sheet Key Items: First piece check includes label matches actual part, Validation of no old labels left at process, and only one part # at work cell.
Production / Packing	<ol> <li>Production tracking log that tracks part number, lot number, production date, and time.</li> <li>Production manuals posted at station which includes label validation.</li> <li>Only one storage location at line for labels</li> </ol>
Inspection	QC does 200% check which includes label validation and records result in inspection log by serial number (each tote). Manuals are posted at the line.  Note: If Manufacturing equipment 100% electronically verifies parts match label by vision system or part ID scanning than 200% check is not required.

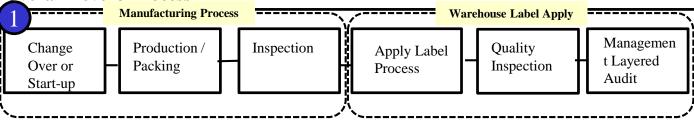
#### < Warehouse DENSO Label Apply Process>

Item	Requirements			
Label Generation and Control	Labeling Sign-Out Log. Once Shipping Labels are generated from NASWEB a Sign-Out Log is utilized which is controlled by management to track the label issuing to shipping process.  Key Information on Sign-out Log. Part Number, # of Labels Issued, Ship Date, Associate that printed the labels, and issue to shipping process date.			
Label Process	<ol> <li>Scan system exists that cannot be bypassed that electronically checks DENSO Label versus Supplier label.</li> <li>Labeling is one for one process.</li> </ol>			
1 Piece Check per Box	1 piece per DENSO Label is verified that part matches DENSO Kanban.  Note: Not required if manufacturing equipment electronically verifies parts to label			
Management Layered Audits	Key Point; Management must complete layered audits a minimum of one time per month to ensure processes are being followed.			



## 5.2 Level 3 Warehouse Labeling Electronic Confirmation

#### <Overall Level 3 Process>



## **Step 1 Change Over or Startup Level 3**

Changeover Check Sheet Key Items:

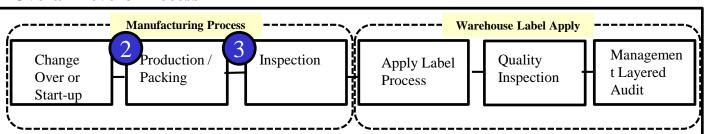
Purpose: Ensure no Part Mixing occurs during changeover, rotation, and or Shift Change. Confirm label control is handled as part as changeover.

Start Up, Change over, Rotation, and Shift Change Verification								
Part Nun	Part Number to Run AA125450-1010							
	STEP/DUTY		Check Box					
1)	Validate the labels issued for the parts scheduled to run. Also, ensure clean point prior to part/rotation/shift change.		Fred Simpson (9/18) 9:00 a.m.					
2)	Check the log to confirm (and record supervision approval) that the process has been cleared of all old parts and old labels.	Fred Simpson (9/18) 9:00 a.m.						
3)	Confirm that proper packaging and labeling manuals have been set up, and they match the scheduled job.		Fred Simpson (9/18) 9:00 a.m.					
4)	Perform a first and last piece check to confirm and record received labels are for proper part numbers and the planned production quantity.		Fred Simpson (9/18) 9:00 a.m.					



#### 5.3 Level 3 Warehouse Labeling Electronic Confirmation

#### <Overall Level 3 Process>



## **Step 2 Production and Packing Level 3**

- 1) Production tracking log that tracks part number, lot number, production date, time, and Supplier Internal Identification.
- 2) Production manuals posted at station which includes label validation.
- 3) Only one storage location at line for labels

**Purpose:** Ensure no Part Mixing or wrong label applied at final pack-out.

## **Step 3 Quality Inspection Level 3**

- 1) QC does 200% check which includes label validation and records result in inspection log by serial number for each tote. See example below:
- 2) Inspection Manuals are posted at the line

**Purpose:** Ensure no wrong label applied by production and packing process

#### **EXAMPLE: FINAL PRODUCT VERIFICATION**

FINAL PRODUCT AUDIT LOG

#### TOOL #:

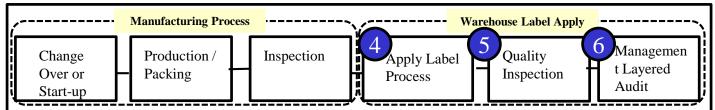
**INTERNAL PART #:** 

LABEL SERIAL NUMBERS AUDITED (LAST 4 DIGITS EXCEPT WHEN WHOLE # CHABGES	100% Part and Label Verification	FINAL AUDITOR CLOCK	OP CLOCK NUMBER(S)	DATE	IF REJECT, CONTROL PLAN #	*NCPR#
00202582-2586		5713	8430	6-May		
2587-2590		5713	8430	6-May		
2591-2593		5713	8430	6-May		
2594		5713	8430	6-May		
2595	1ST	5713	8430	6-May		
2418552		5713	5747	6-May		
8553-8554		5713	5747	6-May		



#### 5.4 Level 3 Warehouse Labeling Electronic Confirmation

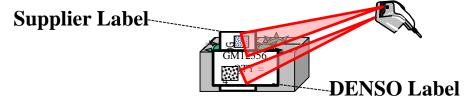
#### <Overall Level 3 Process>



4 Apply DENSO Label Process Level 3 <a href="#"><Electronic Confirmation of Shipping Label Part Number></a>

Purpose: Ensure Label on Box Match parts in container by electronic check.

Use Scanner to Electronically confirm that the Internal Label and DENSO Shipping Label part number and quantity match. The scanner should also record label serial history for traceability from Manufacturing Date and Time to shipping label.



Quality Inspection: Check 1 Piece Per Box Check Level 3

• Check 1 part per container per DENSO Label to verify that the part matches DENSO Label. Note: Not required if manufacturing equipment electronically verifies parts to label



Purpose: Confirm Parts matches DENSO label.

Management Layered Audits Level 3
Key Point: Management must complete layered audits to ensure processes are being followed. (Example Leader Check Frequency (Line Leader – 2 times per week, Supervisor (1 time per week), Plant Manager (1 time per month)

**Purpose:** Ensure by several different levels of management that standardize processes are being followed and are working well for the associates

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### 6.0 Level 4 Warehouse Labeling Manual Confirmation

## Level 4 Warehouse Labeling Manual Confirmation



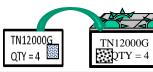
#### 6.1 Level 4 Warehouse Labeling Manual Confirmation

#### **Example**

#### <Manual Confirmation of Shipping Label Part Number>

- 1. Confirm Supplier Kanban and DENSO part number and quantity match. After confirmation Apply DENSO Label to tote or box.
- 2. Manually confirm that the Internal Label and DENSO Shipping Label part number and quantity match. The internal label should be saved for 3 months with the DENSO D.O. number for traceability.

DENSO label



Supplier Label

#### < Manufacturing Labeling with Supplier Internal Tag>

Item	Requirements
Change Over or Start-up	Start up / Change Over / Rotation / Shift Change Verification *Changeover Check Sheet Key Items: First piece check includes label matches actual part, Validation of no old labels left at process, and only one part # at work cell.
Production / Packing	<ol> <li>Production tracking log that tracks part number, lot number, production date, and time.</li> <li>Production manuals posted at station which includes label validation.</li> <li>Only one storage location at line for labels</li> </ol>
Inspection	QC does 200% check which includes label validation and records result in inspection log by serial number (each tote). Manuals are posted at the line  Note: If Manufacturing equipment 100% electronically verifies parts match label by vision system or part ID scanning than 200% check is not required.

#### <Warehouse DENSO Label Apply Process>

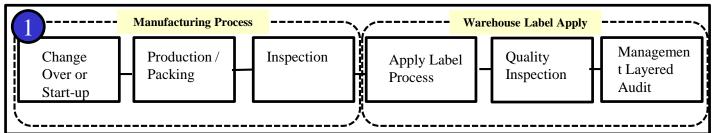
Item	Requirements
Label Generation and Control	Labeling Sign-Out Log. Once Shipping Labels are generated from NASWEB a Sign-Out Log is utilized which is controlled by management to track the label issuing to manufacturing line.  Key Information on Sign-out Log. Part Number, # of Labels Issued, Ship Date, Associate that printed the labels, and Issue to line date.
Label Process	<ol> <li>Confirm Supplier Kanban and DENSO part number and quantity match. After confirmation Apply DENSO Label to tote or box. Then complete 1 piece check to confirm correct label.</li> <li>Manually confirm that the Internal Label and DENSO Shipping Label part number and quantity match. The internal label should be saved for 3 months with the DENSO D.O. number for traceability.</li> </ol>
1 Piece Check per Box	1 piece per DENSO Label is verified that part matches DENSO Kanban.  Note: Not required if manufacturing equipment electronically verifies parts to label
Management Layered Audits	Key Point; Management must complete layered audits a minimum of one time per month to ensure processes are being followed.

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## 6.2 Level 4 Warehouse Labeling Manual Confirmation

#### <Overall Level 4 Process>



## **Change Over or Startup Level 4**

• Changeover Check Sheet Key Items:

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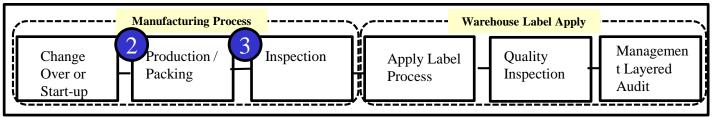
**Purpose:** Ensure no Part Mixing occurs during changeover, rotation, and or Shift Change. Confirm label control is handled as part as changeover.

Start Up, Change over, Rotation, and Shift						
Change Verification						
Part Number to Run AA125450-1010						
	STEP/DUTY		Check Box			
1)	Validate the labels issued parts scheduled to run. ensure clean point pric part/rotation/shift cha	Also, or to	Fred Simpson (9/18) 9:00 a.m.			
2)	Check the log to confirm (and record supervision approval) that the process has been cleared of all old parts and old labels.  Free Simp (9/18)					
3)	Confirm that proper packaging and labeling manuals have been set up, and they match the scheduled job.					
4)	Perform a first and last piece check to confirm and record received 4) labels are for proper part numbers and the planned production quantity.		Fred Simpson (9/18) 9:00 a.m.			



#### 6.3 Level 4 Warehouse Labeling Manual Confirmation

#### <Overall Level 3 Process>



## **Production and Packing Level 4**

- 1) Production tracking log that tracks part number, lot number, production date, time, and Supplier Internal Identification.
- 2) Production manuals posted at station which includes label validation.
- 3) Only one storage location at line for labels

**Purpose:** Ensure no Part Mixing or wrong label applied at final pack-out.

## **Quality Inspection Level 4**

- 1) QC does 200% check which includes label validation and records result in inspection log by serial number for each tote. See example below:
- 2) Inspection Manuals are posted at the line

**Purpose:** Ensure no wrong label applied by production and packing process

#### **EXAMPLE: FINAL PRODUCT VERIFICATION**

FINAL PRODUCT AUDIT LOG

TOOL #:

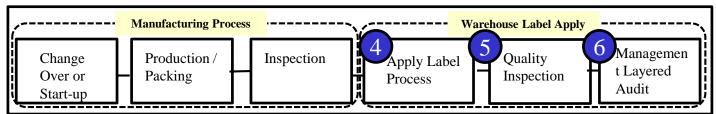
**INTERNAL PART #:** 

LABEL SERIAL NUMBERS AUDITED (LAST 4 DIGITS EXCEPT WHEN WHOLE # CHABGES	100% Part and Label Verification	FINAL AUDITOR CLOCK	OP CLOCK NUMBER(S)	DATE	IF REJECT, CONTROL PLAN #	*NCPR#
00202582-2586		5713	8430	6-May		
2587-2590		5713	8430	6-May		
2591-2593		5713	8430	6-May		
2594		5713	8430	6-May		
2595	1ST	5713	8430	6-May		
2418552		5713	5747	6-May		
8553-8554		5713	5747	6-May		



#### 6.4 Level 4 Warehouse Labeling Manual Confirmation

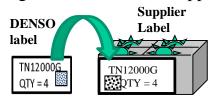
#### <Overall Level 3 Process>



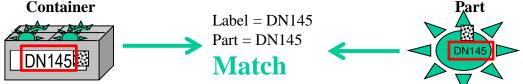
Apply DENSO Label Process Level 4 <Manually Confirm Shipping Label Part Number matches Internal Tag>

**Purpose:** Ensure Label on Box Match parts in container.

Manually confirm that the Internal Label and DENSO Shipping Label part number and quantity match. Manually record the label serial history for traceability from Manufacturing Date and Time to shipping label.



- **Quality Inspection: Check 1 Piece Per Box Check Level 4** 
  - Check 1 part per container per DENSO Label to verify that the part matches DENSO Label. Note: Not required if manufacturing equipment electronically verifies parts to label



Purpose: Confirm Parts matches DENSO label.

**Management Layered Audits Level 4** 

**Key Point:** Management must complete layered audits to ensure processes are being followed. (Example Leader Check Frequency (Line Leader – 2 times per week, Supervisor (1 time per month), Plant Manager (Quarterly)

**Purpose:** Ensure by several different levels of management that standardize processes are being followed and are working well for the associates



## 7.0 Repack Control in Warehouse

## Repack in Warehouse



## 7.1 Repack Minimum Standards

Repack: Repack Finished Goods from supplier or in-house production to same or different lot size and placing new Label on parts prior to shipping to DENSO. Below is list of minimum requirements to prevent wrong DENSO Shipping label applied.

	Category	Minimum Standard	Recommendation (Not Required but Suggested Best Practice)
1	Layout	Create a <u>designated area</u> for the <u>Repack Process</u> . This area should include locations for incoming repack parts, customer empty pkg, Repack Area, and Outgoing Parts.  Purpose: Provide Clear Layout and visual control to prevent Mixing or Missing Parts.	* For tote repack setup work station that includes a designated kanban storage and packaging specs.  * Utilize Roller Racks to control FIFO and forklift traffic.
2	Scheduling Trigger	A scheduling system should be maintained to clearly give direction on which part number, quantity, and when to repack. This system should also direct what packaging to use and provide kanbans for job.  Purpose: Provide system for leveling work through out the day and avoid rushing repack operation to meet shipping schedule.	Pull System> Use set number of kanbans in loop to keep inventory in After Repack Warehouse location. Utilize lot making post to build lots based off repack min lot size to avoid partials. Progress Post should be used to give direction on what is next priority to repack and to show ahead or behind status.
3	Part to Label Verification	Confirm one part per <u>label to confirm the part</u> <u>number</u> on the actual part matches the repack kanban part number. If label is not available use an inspection standard to identify part. <b>Purpose:</b> Catch Mix Parts from In-house or Supplier.	NA
4	Labeling	After container is repacked associate must confirm new kanban part number matches previous label base part #. If the parts match then label the new container. (Base Part = Part minus packaging code)  Purpose: Confirm by visual check that the part number matches to prevent Mix Label.	* Use Scanning Confirmation to Generate Denso Shipping Label with traceability * Once the container is full the associate should apply new kanban to container after verifying the kanban part number matches previous incoming kanban.
5	Process Completion	There should be rule in OMS that specifies that associate should not stop repack cycle until lot is complete.  Purpose: Do not leave work station with incomplete repack lot for break, lunch, or end of shift to prevent mix or missing parts.	NA

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#### 8.0 Supplier Label Requirements & QR Code Spec

## **<DENSO** 6.5x4 Large Container Label Tech Spec>

#### Part Number

Block Title = Part Number

Data Identifier = P

<u>Data</u> = Part Number (including dash)

Text Height = 7 mm

Source = 862 Segment LIN03(BP)

Maximum Length = 15

#### **Description**

<u>Block Title</u> = Description

<u>Data</u> = Part Description

Text Height = 5 mm

Source = 862 Segment LIN05(PD)

Maximum Length = 30

#### Quantity

 $\underline{Block\ Title} = Qty$ 

 $\underline{Data\ Identifier} = Q$ 

Data = Based on Order quantity and

Box quantity

Text Height = 7 mm

Source = 862 Segment P0402(BX)

Maximum Length = 8

#### Serial Number (by supplier code)

Block Title = Serial #

 $\underline{\text{Data Identifier}} = 3S$ 

<u>Data</u> = Based on Supplier code and serial number (including dash) \*Note:

Strip off the affiliate when creating the tags, ONLY have the Supplier Code –

Serial # (Serial# = Sequential 0 to

69999 by part number) Text Height = 7 mm

Source = 862 Segment N104(SU)

Maximum Length = 12

#### **Due Date**

 $\underline{Block\ Title} = Due\ Date$ 

<u>Data</u> = Delivery due date

 $\underline{\text{Text Height}} = 6 \text{ mm}$ 

Source = 862 Segment DTM02(002)

Maximum Length = 8

#### Location

Block Title = Location

<u>Data</u> = Warehouse location

 $\underline{\text{Text Height}} = 6 \text{ mm}$ 

Source = 862 Segment REF02(RL)

 $\underline{Maximum Length} = 5$ 

## 

#### Warehouse

**Plant Code** 

Block Title = Plant Code

Source = 862 Segment N104(ST)

Data = Ship to plant

Text Height =14 mm

Maximum Length = 2

Block Title = Warehouse

<u>Data</u> = Receiving Warehouse

 $\underline{\text{Text Height}} = 6 \text{ mm}$ 

Source = 862 Segment REF02(RV)

Maximum Length = 1

#### Control Number

Block Title = Control #

<u>Data</u> = Control number from 862

 $\underline{\text{Text Height}} = 6 \text{ mm}$ 

Source = 862 Segment LIN07(KP)

Maximum Length = 4

#### Tag Slip 1 Remark

Block Title = Tag Slip 1

 $\underline{Data} = Remark / Comment$ 

 $\underline{\text{Text Height}} = 9 \text{ mm}$ 

Source = 862 Segment PKG05 when

PKG01=F

This is an input field at "Tag Slip Remarks (1)" Note: User default is

blank if no comment is desire

 $\underline{Maximum\ Length} = 8$ 

<u>Label Purpose</u>: Identifies a part number in the container

<u>Size</u>: 4 x 6.5; cardstock. Illustration is NOT actual size. Any dimensions that are not otherwise specified on this page SHALL be in compliance with AIAG B-10.

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#### 8.0 Supplier Label Requirements & QR Code Spec

## <DENSO 3 x1 Small Container Label Specification>

#### **Description**

**Block Title** = Description

<u>Data</u> = Part Description

 $\underline{\text{Text Height}} = 5 \text{ mm}$ 

Source = 862 Segment LIN05(PD)

Maximum Length = 30

#### **Part Number**

Block Title = Part Number

Data Identifier = P

<u>Data</u> = Part Number (including dash)

Text Height = 7 mm

Source = 862 Segment LIN03(BP)

Maximum Length = 15

## TN177632-8850J1

Desc OSP PCB - 642L AUTO A21608-27917 Sup/Serial# 120 Qty



#### Serial Number (by supplier code)

Block Title = Serial #

Data Identifier = 3S

Data = Based on Supplier code and serial number (including dash) \*Note:

Strip off the affiliate when creating the

tags. ONLY have the Supplier Code -

*Serial* # (*Serial* # = *sequential* 0 to

69999 by part number)

 $\underline{\text{Text Height}} = 7 \text{ mm}$ 

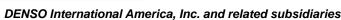
Source = 862 Segment N104(SU)

Maximum Length = 12

#### Quantity

- •Block Title = Qty
- •<u>Data Identifier</u> = Q
- •Data = Based on Order quantity and
- •Box quantity
- $\underline{\text{Text Height}} = 7 \text{ mm}$
- •Source = 862 Segment P0402(BX)
- •<u>Maximum Length</u> = 8

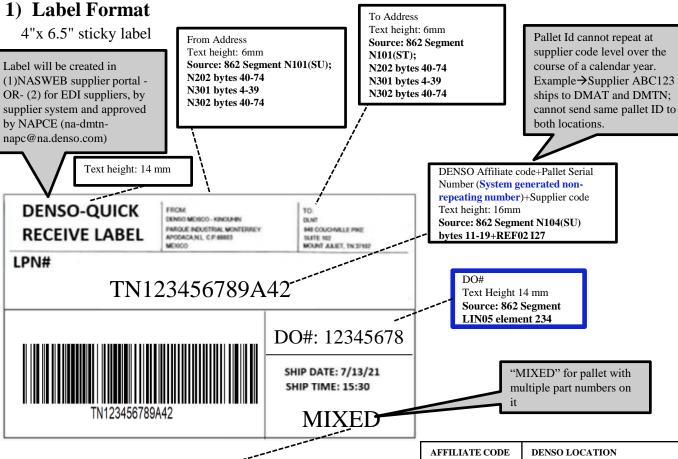
Labeling and Shipping Issued: 2017





#### 8.0 Supplier Label Requirements & QR Code Spec

## <DENSO Quick Receive (LPN) Label Specification>



#### **Linear Barcode Contents:**

- 1. Tag format identifier (QR)
- 2. DENSO affiliate code+Pallet ID+Supplier Code to DENSO (padded with blanks on right side to make 6 digits if less than 6 digits)

Total characters=19 2 digits: Identifier QR

2 digits: DENSO Affiliate code (please refer to table for guide)

9 digits: Unique Pallet Serial number

6 digits: Supplier code

This information will be tied to ASN

SAMPLE:

ORTN123456789A42

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1		
	AFFILIATE CODE	DENSO LOCATION
	AA	DMMI
	AK	DMAR
	CN	DMCN
	TN	DMTN
	NC	DMNC
	MX	DNMX
	KA	KDMK
	WH	NALC (DLNT, DLIA, DLMI, DLTX)
	GX	ASMX
	YB	Air Systems
	AN	DMAT

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#### 8.1 Label Specification



\* These need to be printed on 6.5 x 8 kanban stock (**Not Paper**).

\* You can select your own supplier if you like or choose from above, **but it must be card stock** (**Printing on paper not acceptable**)

**Purpose:** To inform suppliers of purchasing card

stock for kanbans < Labeling Totes>

**Timing** Order L/T is approximately 3 weeks

**Purchased** 

<u>By:</u>

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Each supplier is responsible for meeting this reqt and purchasing the card stock.

**Supplier** Taylor Communications ----

INCORPORATED AS: STANDARD

REGISTER, INC

4609 Branch Ave, Portage, MI 49002

Contact:

Kellie Hodgkins – Account Executive

Office: 877.752.7025 Ext. 2

E-mail -

Kellie. Hodgkins@taylor communications.com

**Specification** DWOS NASWEB Tags

Blank white tags perforated at 4" from top.

Size 6 ½ x 8

Wrapped in qty's of 2500

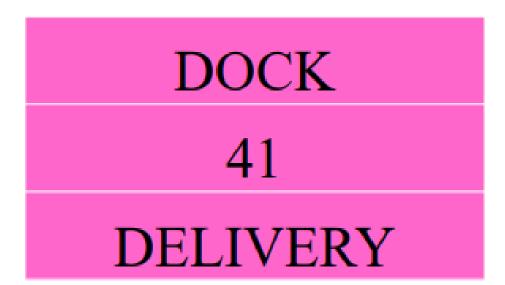
2000 per carton

\$56.75 / M per thousand



#### 8.2 NPI Label Specification

- \*New Product Label (Pink, paper label)
- All new product shipped to DENSO that is 1. ordered by a Delivery Order must have a pink New Product label on each box.
- 2. The pink New Product label is to be located as follows:
- -Pink label should be on each side of skid (fork side).
- -If air shipped apply clearly on outside of box. Please refer to DO#/PO#.
- 3. If shipped under DO# /dock code # or PO# use below pink label:



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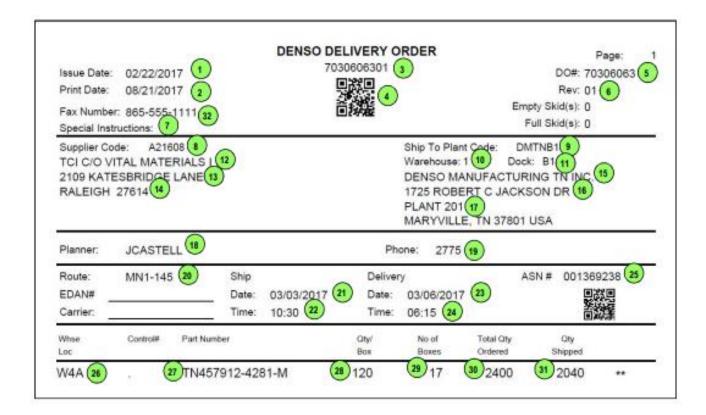


## **DELIVERY ORDER**

PURPOSE	To provide a uniform shipping document to accompany all shipments to DENSO.		
TIMING	<ul> <li>(1) To be printed before staging via NASWEB. (See NASWEB manual on Supplier Guide page)</li> <li>(2) Attached to every shipment sent to DENSO.  Note: DENSO cannot accept shipments without a Delivery Order.</li> <li>(3) ASN must be sent 30 minutes after shipment leaves - OR – Within timeline determined by DENSO group company.</li> </ul>		
CREATED BY	SUPPLIER (from Web-site)		
ROUTING DENSO	Send Firm Order (with D.O. #) to Web-site  Delivery Order Ships		
WEB PROVIDER	Copy of D.O. given to driver, if Milkrun  Display Firm Order with D.O. #		
SUPPLIER	Print Delivery Order from Web		



## **DELIVERY ORDER**





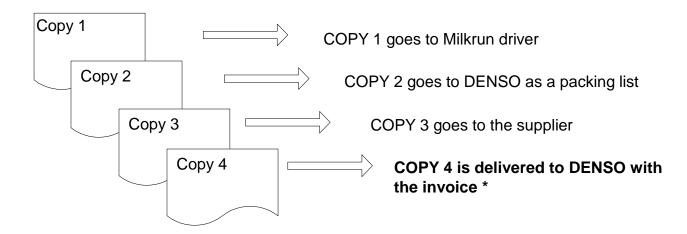
## **DELIVERY ORDER EXPLANATION**

#	Field	Source	Data Element	Comments
1	Issue Date	862	BSS03	Creation Date
2	Print Date	Web Site		Calculated field
3	Delivery Order and Rev#	862		
4	Delivery Order # (QR Code)	862/Web Site		(Supplier Code - Serial #)
5	Delivery Order #	862	REF02 (MF)	(LIN/FST/JIT Loop) Original = 8 digits, Revision = 10 digits
6	Revision #	862	REF02 (MF)	(LIN/FST/JIT Loop) Last 2 digits of 10 digit D/O#.
7	Special Instructions	862	REF02 (KK)	
8	Supplier Code	862	N104 (SU)	
9	Plant Code	862	N104 (ST)	
10	Receiving Warehouse	862		(LIN Loop)
	Dock Code	862	REF02 (DK)	(LIN Loop)
12	Ship From (Supplier) Name	Web Site		From table
	Ship From (Supplier) Address	Web Site		From table
	Ship From (Supplier) City, State, Zip	Web Site		From table
	Ship To Company Name	Web Site		From table
	Ship To Plant Address	Web Site		From table
	Ship To Plant City, State, Zip	Web Site		From table
18	Planner Name	862	PER02	
	Planner Phone	862	PER04	
20	Route #	862		(LIN/FST/JIT Loop)
21	Ship Date	862	DTM02 (118)	Optional> Only sent for milkrun routes
	Ship Time	862	DTM03 (118)	Optional> Only sent for milkrun routes
23	Delivery Date	862	DTM02 (002)	
				Optional> Only sent when time is registered for
	Delivery Time	862	DTM02 (002)	Dock/Route
25	ASN#	862/Web Site		(Supplier Code - Serial #)
26	Warehouse Location	862	REF02 (RL)	(LIN Loop)
27	Part #	862	LIN03	
28	Qty per Box	862	PO402 (BX)	
29	# of Boxes	Web Site		Calculated field. Order Qty divided by Qty per Box
30	Order Qty	862	FST01	, , , ,
31	Ship Qty	Web Site		User entered field
32	Supplier Fax #	862		

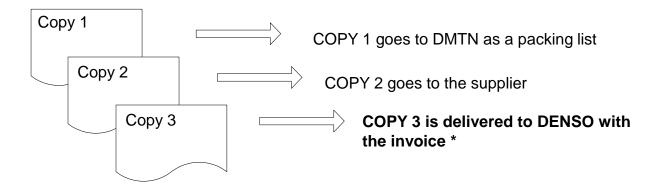


## **DELIVERY ORDER COPY FLOW**

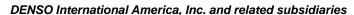
#### 1. MILKRUN DELIVERY ORDER HANDLING: 4 COPIES



### 2. NON-MILKRUN DELIVERY ORDER HANDLING: 3 COPIES



\* Payment can be denied if a copy of Delivery Order does not accompany the invoice.





## ORDERING PROCESS KEY POINTS

- 1. The Part Number and Shipping quantity are computer generated and should never be changed.
- 2. Overages will not be accepted, unless the part is a Variable Quantity part (i.e. raw material).
- When modifications are made to the Delivery Order, prior approval must be given by your DENSO Production Control Specialist.
- 4. When the shipment is ready for pick-up, the Supplier must sign the D.O.
- If the Supplier has shipped an incomplete order, the balance of the order should be shipped via an expedited method of transportation at the Supplier's expense.
- 6. Firm order revision conditions:

Increases - Parts which are increased print to an additional D.O. Decreases - Prints new D.O. for all parts (discard previous D.O.).

7. A copy of the D.O. should be attached to the invoice. Invoice should reference D.O. number (NOT THE PURCHASE ORDER NUMBER). Payment can be denied if a copy of the D.O. does not accompany the invoice.

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## MIXED LOAD LABEL

PURPOSE	DENSO standard label used to identify the contents of a pallet with more than one part number.		
RESPONSIBILITY	The supplier is responsible for identifying and labeling all mixed pallets.		
TIMING	Created and attached to every mixed pallet at time of shipment.		
	<ul> <li>Blank form, <b>DENSO 00 5.2</b>, found on page 3-16</li> <li>White 8 ½" x 11" sheet</li> <li>Attached to each end of the mixed pallet</li> <li>DENSO part number, number of cartons and number of pieces</li> </ul>		
	MIXED		
REQUIREMENTS	PALLET PART# # 0F CTNS. # 0F PCS		
NEGOMENTO			
	TOTALS		
ROUTING	MIXED PALLET BARTA 605 CINS. 6.05 PCS  TOTALS  Ships		
	Attached to pallet		

**Labeling and Shipping** 

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## MIXED LOAD LABEL EXAMPLE

## MIXED PALLET

PART#	# OF CTNS.	# OF PCS
TOTALS		

**DMTN 00 5.2** 



## CORRECT KANBAN PLACEMENT

#### **Examples of correct label placement:**

All Kanbans must face outward when possible, unless otherwise specified by DENSO. This will allow auditing without physically handling containers.



Returnable Tote



Returnable Pallet



Expendable Box



**Expendable Pallet** 

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## **REELED PARTS**

PURPOSE	To distinguish between reels after removal from the container.	
RESPONSIBILITY	Supplier must attach part number label to reel, when shipping reeled parts.	
TIMING	Prior to shipment of parts.	
REQUIREMENTS	Label should show DENSO part number, as shown on Kanban card. Label format is not specified.	
ILLUSTRATION	AT	

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PURPOSE	To notify the Packaging Department of damaged returnable containers.	
TIMING	When Supplier identifies any damaged or unusable containers.	
CREATED BY	Supplier See sample on page 4-7 and explanation on 4-8. Blank form, DENSO 00 4.1, in section 8.	
ROUTING	Damaged Packaging	
SUPPLIER	Report  E-mail to Packaging Department & Production Control Contact	
DMTN/DMAT	Damaged Packaging Report	

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<b>DENSO</b>		
DAMAGED PACKAGING REPORT		
DMTN		
TO: Packaging Engineer 1		
FROM: Supplier Contact 2		
SUPPLIER PHONE #: 123-456-7899 (3)		
SUPPLIER NAME: XYZ (4)		
PACKAGING DESCRIPTION: Returnable 12 x 15 x 7		
QTY OF PKG DAMAGED/ UNFIT FOR USE: 12 totes 6		
REASON UNUSABLE: Damaged (7)		
WILL THIS CAUSE A SHORTAGE: Yes X No 8		
9		
USED ON PART NUMBER(S)		
COMMENTS 10		
SUPPLIER SIGN / DATE John Doe 2/2/2000		
John Doe 2/2/2000		
Label and send packaging back to DENSO on the next shipment.		
DMTN 00 4.1		



<u>#</u>	<u>Item</u>	<u>Description</u>	Completed By:
1	То:	DENSO packaging contact	Supplier
2	From:	Supplier contact	
3	Supplier Phone:	Supplier contact's phone number	
4	Supplier Name:	Name of supplier	
5	Packaging Description:	Indicate type of damaged packaging	
6	QTY of Packaging Damaged/ Unfit:	Indicate amount of containers damaged	
7	Reason Unusable:	Describe type of damage	
8	Will this cause a Shortage:	Indicate Yes or No by placing an X in the appropriate box	
9	Used on Part Number(s):	List part numbers which would be shipped in the damaged containers	
10	Comments:	Other information relevant to DMTN	
11	Supplier Signature:	Signature of supplier	



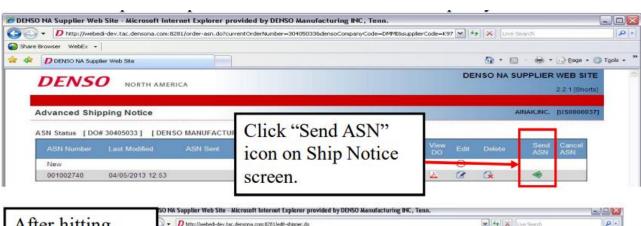
## **EMPTY PACKAGING REPORT**

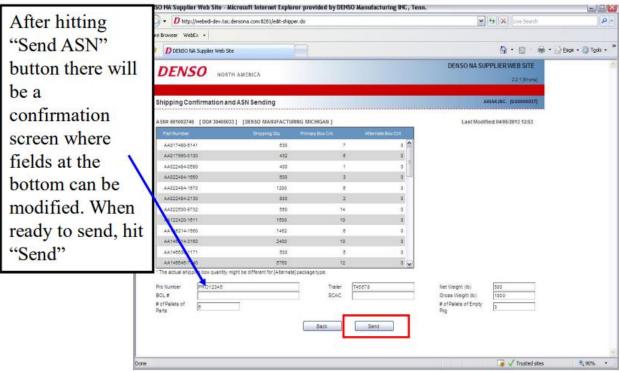
PURPOSE	To identify empty returnable containers	
RESPONSIBILITY	Supplier must use, when shipping empty containers on the same pallet that contains parts.	
TIMING	Every empty returnable container must have the empty kanban attached.	
REQUIREMENTS	Blank form, DENSO 00 5.3, found in section 8 White 8" x 4" label attached to each container  DENSO MFG. TENNESSEE, INC.  EMPT	
ROUTING	Attached to container  Returned to DMTN  Ships	



## Advanced Shipping Notice-Sending

After the parts have shipped to DENSO / ASMO the ASN will be sent within 30 min after shipping (setting can be changed in CIGMA Menu Option P142). Late ASN or ASN that does not match order will generate an email to specified planners to inform them of discrepancy:

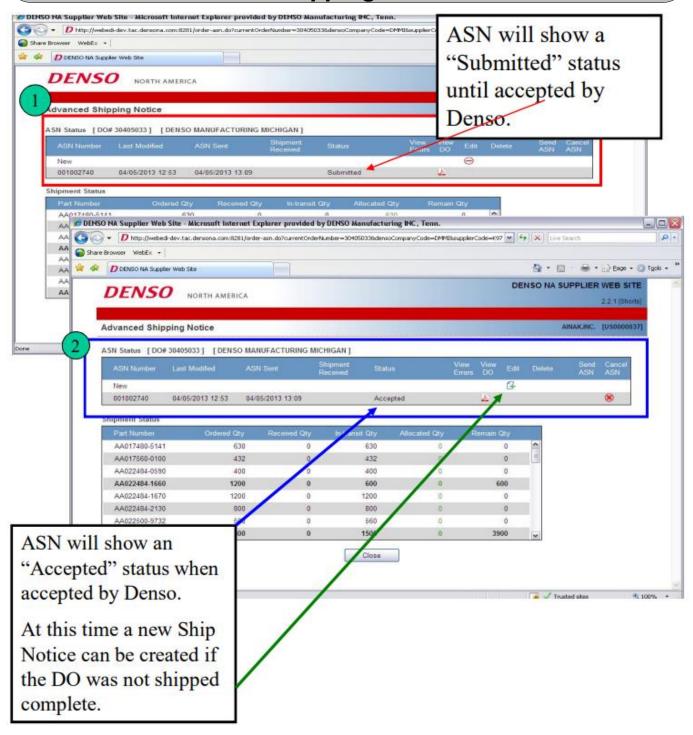




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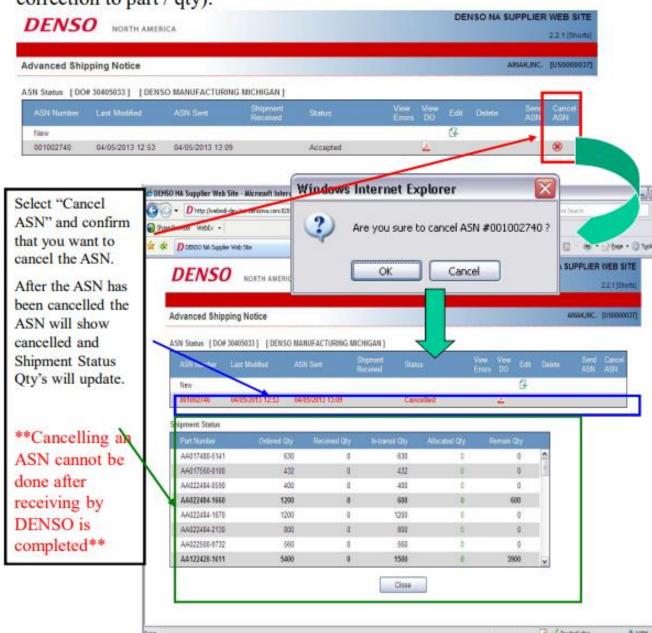
## Advanced Shipping Notice-Status





## Advanced Shipping Notice-Cancelling

If an ASN needs to be cancelled (for shipment that did not pick up or for a correction to part / qty):





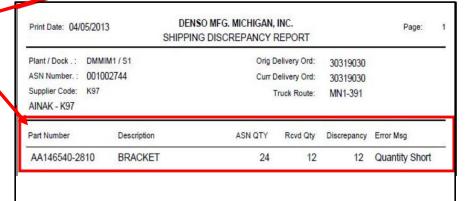
## Advanced Shipping Notice-Receiving Discrepancies



If physical receiving qty does not match ASN qty, a discrepancy report will be posted to NASWEB with the details.

Use this to review discrepancies and make any additional shipments or follow up with planner as required.

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Report will detail part #, ASN Qty and then Actual Rcvd Qty.

Report is posted immediately at the time of DENSO receiving discrepancy.

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