

# Section 4

# <NPI/Engineering Change/Phase Out>

**Purpose:** Explains procedure to be followed for New Product Introductions, engineering changes, and phase out. Key information for these subjects is timing of implementation.

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## **NEW PRODUCT INTRODUCTION**

RESPONSIBILITY	The DENSO NPI group is responsible for providing the tools to suppliers to ensure smooth New product component / A-part start up.
DEFINITION	NPI components and A-parts are those introduced through the New Product Introduction process for new vehicle programs and model changeovers. NPI components are transferred to DENSO Mass Planning Team.
KEY POINTS	<ul> <li>(1.) NPI orders are issued by Delivery Order Number (DO#) through the DWOS system –OR- Purchase order (PO).</li> <li>a. <u>Delivery Order #</u>: Orders placed during mass production runs and pricing set up</li> <li>b. <u>Purchase Order #</u>: Orders of parts before pricing set-up.</li> <li>(2.) NPI manifest could be identified with a specific dock code (at each NAGC discretion).</li> <li>(3.) All NPI shipments must have Bartag(s) and *Pink NPI labels (reference labeling section).</li> <li>(4.) NPI orders MUST NOT BE REFERRED TO AS SAMPLES.</li> <li>(5.) A-Parts are finished goods that are pass-thru parts which are not manufactured by DENSO.</li> </ul>
ORDERING	<ul> <li>(1.) All NPI components and A-parts are forecasted and ordered through the DWOS ordering System, unless ordered by PO. NPI parts are included in the weekly material release and DO's along with the mass production parts.</li> <li>(2.) See the sections for the Material Release, Manifest, and Supplement Manifest in this manual.</li> </ul>

4-1 Issued: 2017



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### **NEW PRODUCT INTRODUCTION**

#### **EXCEPTIONS:**

The following exceptions to those sections occur when discussing NPI parts:

- 1. NPI components and A-parts could be planned by an NPI Specialist. At mass production timing, responsibilities for ordering parts will be moved to a new planner.
- The lot size defaults to 1 per container until packaging specs are approved. The supplier should refer to the NPI Packaging requirement in this manual for packaging of NPI components and A-parts
- 3. Contact your NPI specialist with any questions, change requests, back order information, etc.

NPI/ENG CHG/PHASE OUT



## ENGINEERING CHANGE INSTRUCTION (E.C.I.)

PURPOSE	To advise the Supplier of an Engineering Change and to request timing of implementation.
TIMING	DENSO: Mailed to Supplier with updated drawings when an Engineering Change is needed.  Supplier: Completes Vendor Acknowledgement letter as specified on page 4-4.  Completes Part II and Part III of E.C.I. form & faxes to DENSO P.C. as specified on page 4-5.
ISSUED BY	DENSO Purchasing (Vendor Acknowledgement Letter) Sample on page 4-4 DENSO P.C. (E.C.I.) Sample on page 4-5
ROUTING DENSO	Vendor Letter  DRAWINGS  Vendor Letter  Part II  E.C.I. Part III  Purchasing
SUPPLIER	Vendor Letter  DRAWINGS  Complete Part II  Complete Part III  Complete Vendor Acknowledgement  Vendor Letter

Issued: 2017 4-3





### ENGINEERING CHANGE VENDOR ACKNOWLEDGEMENT

February 25, 2017

Jane Smith Any Company 1500 Atlantic Blvd. Auburn Hills, MI 48326

Issued: 2017

Enclosed is (are) the following drawing(s):

=======================================										
Drawing No.	Pages	Date	Minor Revision #							
ECN: XXXXX-1828		September 9, 2004								
TNXXXXX-XXXX	1	September 1, 2004	3							

Please update your files and implement into your process according to DMTN Production Control instructions.

Ann Yeats Advanced Specialist, Purchasing

#### VENDOR'S ACKNOWLEDGMENT OF RECEIPT

Attention: Carole Haimelin, Purchasing	Fax # (865) 981-5256
Vendor Signature	Date
Please fax acknowledgment upon receipt of the drawings	and/or specifications listed above. If you have any questions, please call
(865) 981-5470.	

**NPI/ENG CHG/PHASE OUT** 

4-4



### **ENGINEERING CHANGE INSTRUCTION FORM**

<b>DENSO</b>		POLICY NO. IPCD-01.004-B
DATE: 1	REF. #: 2	PAGE: 1 / 1
то:	PRODUCT	G. TENNESSEE FION CONTROL  B E/P
SUBJ: ENGINEERING CHANGE INSTRUCTIONS (drawings attached)		DENSO APPROVAL  5 PROD. CONTROL PURCHASING
REPLY ECI ACKNOWLEDGMENT TO:  6 DENSO PRODUCTION CONTROL	DENSO PROD. CONTRO	DL PLANT: 201
PART I. INSTRUCTIONS (To be completed	d by DENSO and sent with drawing	gs)
A. ENGINEERING CHANGE NO.	8	
B. CURRENT PART NUMBER 9	NEW PART NUMB	BER 10
(4.4)	NT PARTS USED UP (TARGET/ RY PCS OF CURRENT PART	
PART II. ACKNOWL*EDGMENT FROM SUPPLIER (To be co	mpleted by supplier within 5 days	of receipt)
A. 13 X CONFIRMED NOT  B. TOOLING MODIFICATION TARGET COMPLETION DATE:  C. NEW PART TARGET DELIVERY DATE:  D. REMARKS (PLEASE REPORT POTENTIAL OBSOLESCEN		E. SIGNATURE:
16		
PART III. SHIPPING ADVICE (To be completed by	supplier and faxed at time of ship	ment)
A. FIRST ACTUAL DELIVERY DATE OF NEW PART:/_		C. SIGNATURE:
B. ACTUAL QUANTITY OF CURRENT & NEW PARTS OF TH CURRENT PARTS: PCS. + NEW PARTS		L PCS: (19)
DENSO PC DENSO PURCH? SUPPLIER DENSO PC $\rightarrow$ DENSO PC (	(ACKNOW.) SHIP. ADV <del>.)→</del> DENSO LOGISTICS	(CC)

Issued: 2017 4-5



### ENGINEERING CHANGE INSTRUCTION FORM EXPLANATION

<u>#</u>	<u>Item</u>	<u>Description</u>	Completed By	Timing
1	Date	Date E.C.I. is issued	DENSO P.C.	When ECI is initiated
2	Ref. #	DENSO Reference #		
3	То	Supplier contact person & company name		
4	From	DENSO P.C. contact person & plant location		
5	DENSO Approval	Approval of DENSO P.C. & Purchasing Dept. management		
6	Reply E.C.I. Acknowledgement to	Name of DENSO PC person responsible for Receiving the E.C.I. Acknowledgment		
7	Reply E.C.I. Shipping advice to	Name of DENSO P.C. contact person responsible for receiving the E.C.I. Shipping Notice		
8	Engineering change no.	Engineering change number		
9	Current part number	DENSO's current part number		
10	New part number	DENSO's part number after engineering change		
11 12	Implementation timing Remarks	DENSO's target implementation timing & method for the engineering change DENSO's additional comments		
			↓	
13	Confirmed/Not Confirmed	Supplier indicates their acceptance or rejection of the E.C.I. by checking the appropriate box	Supplier	Within 5 days of Receipt of ECI form & drawings
14	Tooling modification completion date	Supplier indicates their target date for modification of tooling		
15	New part delivery date	Supplier indicates their target date for first delivery of changed parts		
16	Remarks	Supplier's comments; obsolete materials/quantities		
17	Signature	Signature of person preparing acknowledgement		<b>1</b>
18	First delivery of new parts	Supplier's actual delivery date to DENSO for changed parts		At time of first shipment of changed parts
19	Qty. of current & new parts of first shipment	Supplier indicates actual quantities of current & changed parts shipped at time of first shipment		
20	Signature	Signature of person preparing shipping advice		<b>↓</b>
1-	ounds 2017		NPI/ENG	CHG/PHASE OU

Issued: 2017 4-6



### **ENGINEERING CHANGE**

PURPOSE	To provide a method for communicating changes to any component or A-part.
RESPONSIBILITY	DENSO PC, DENSO Purchasing and the supplier are responsible for coordinating all NPI/ENG CHG/PHASE OUT changes
TYPES	1. RUNNING CHANGES-This means that the timing of the change will occur when the stock of the old part has been depleted. It is very important that the supplier get an accurate inventory of the old part.  2. NON-RUNNING CHANGES-(usually from the start up of a Model Year) - This means that a specific date has been set for the NPI/ENG CHG/PHASE OUT change to happen, regardless of inventory levels. In most cases the date is set far enough in advance to allow for proper planning.
PROCEDURE	<ol> <li>DENSO Purchasing and PC will receive notification of the NPI/ENG CHG/PHASE OUT change from DENSO Product NPI/ENG CHG/PHASE OUT.</li> <li>DENSO Purchasing will contact the supplier sales department regarding the NPI/ENG CHG/PHASE OUT change. DENSO Purchasing will send an engineering drawing of the new part to the supplier.</li> <li>DENSO PC will contact their representative at the supplier to determine timing of the change. At this time PC may request an inventory of finished product, work in process and raw material. Based on this information, the PC specialist will determine a changeover date.</li> <li>If this change involves a die modification, advance production requirements will be handled with the DENSO PC specialist and their supplier representative.</li> <li>When the DENSO PC specialist knows the timing of the change they will modify the Material Release.</li> </ol>

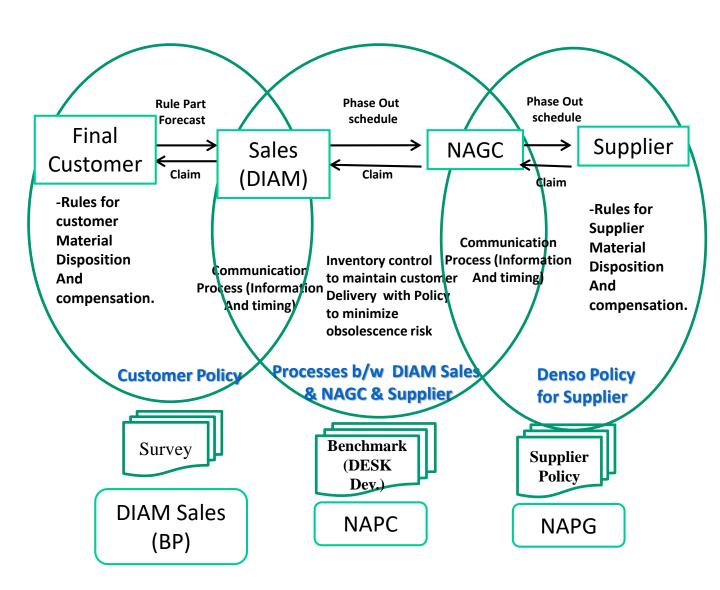
**NPI/ENG CHG/PHASE OUT** 

4-7



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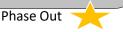
### Phase Out-Relationships



**NPI/ENG CHG/PHASE OUT** 



## Phase Out-Supplier Notification



#### Phase Out Notification

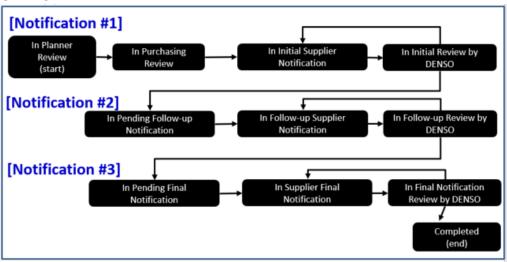
Action Item	Resp.	Time Frame before Phaseout	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
Send Phase Out Notification and Claim Sheet to Suppliers	PC	6 months	Ζ	7			N.	Ą			

- > Official Information should be sent to suppliers at least 6 months in advance.
- ➤ It is recommended that the <u>DENSO Production Control Department sends the official</u> **notice** to the supplier and cc Purchasing.
- ➤ This is a courtesy notice. The supplier should continue to base planning on Denso NASWEB orders.
- Please review DENSO Material Commitment document (Appendix I).

#### <Denso Collaboration Center>

- 1. Phase Out Notification is Managed with Standard Method
- 2. PC Initiates Phase-out Notification
- 3. Supplier Initiates #2 Notification and Final Notification

#### <Workflow>



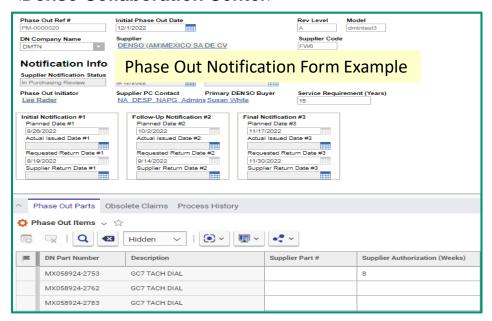
\* Suppler Must Follow Notification Instructions, including Data Entry Requirements and On-Time Communications to DENSO

== Link to Collaboration Center - DENSO NA Collaboration Center (nadenso.com)



### Phase Out-Supplier Notification

#### <Denso Collaboration Center>



#### <Manual Method>

Phase Out Notification Form Example									
DENSO MANUFAC	CTURING							· · · · · ·	
TO:					FROM:				DATE OF ISSU
					cc:				
SUBJECT: PHASEOUT	NOTIFICA	ATION T	O SUP	PLIERS	PLEASE A	CKNOWL	EDGE BY R	ETURN FAX OR	E-MAIL WITHIN 3 DAY
. SCHEDULE									
DATES									
AST DELIVERY TO DI AST FIRM ORDER TO			<u> </u>	+	1				_
FIRM" FORECAST FR									
NITIAL PHASE OUT SO									
PART NUMBERS	DATE		EMENTS?		MAINING ELIVER	DATE	QTY	CONSIDERED PO #	SUPPLIER AGREEMENT
1		ΥO	R N						
2		ΥO	R N						
3		ΥO	R N						
4		ΥO	R N						
5		ΥO	R N						
6		ΥO	R N						
7		Y O	R N						
8		Y O	R N						
9		ΥO	R N						
10		ΥO	R N						
11		ΥO	R N						
12		ΥO	R N						
13		ΥO	R N						
14		ΥO	R N						
			-						



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### **Phase Out-Final Orders**

Item	Action Item	Resp.	Time Frame before Phaseout	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
	Send Final Orders (Partial Lots last order) to Suppliers	PC	2 weeks Local NA CKD Sea 2 weeks CKD Air					Z	$\Delta_{\Delta}$			

> Send final order in partial box to avoid obsolescence.

Phase Out 4-11



### Phase Out-Dead Stock Reporting

DENSO Suppliers have two weeks after last shipment of parts to submit phase out claim to PC contact which includes the following:

- 1. Waterfall worksheet based on suppliers FG/Raw material commitment showing forecast to firm change (DENSO Material Commitment in Appendix of section)
- 2. Claim Form showing FG /Raw material part numbers, quantity and cost. Claimable amount must be over \$500. Claimable amount may be higher than what the supplier actually claims due to suppliers ability to cut raw material orders. Supplier must have claimed inventory on hand for DENSO review.
- Claims must be submitted by supplier within 3 weeks of final shipment. Claims submitted later than this will not be accepted.
- All claims should be submitted to DENSO PC & Purchasing Contacts. Claims will be reviewed within 4 weeks of final shipment.
- \*Phase Out Forms can be found in the Forms section of this manual

Phase Out 4-12