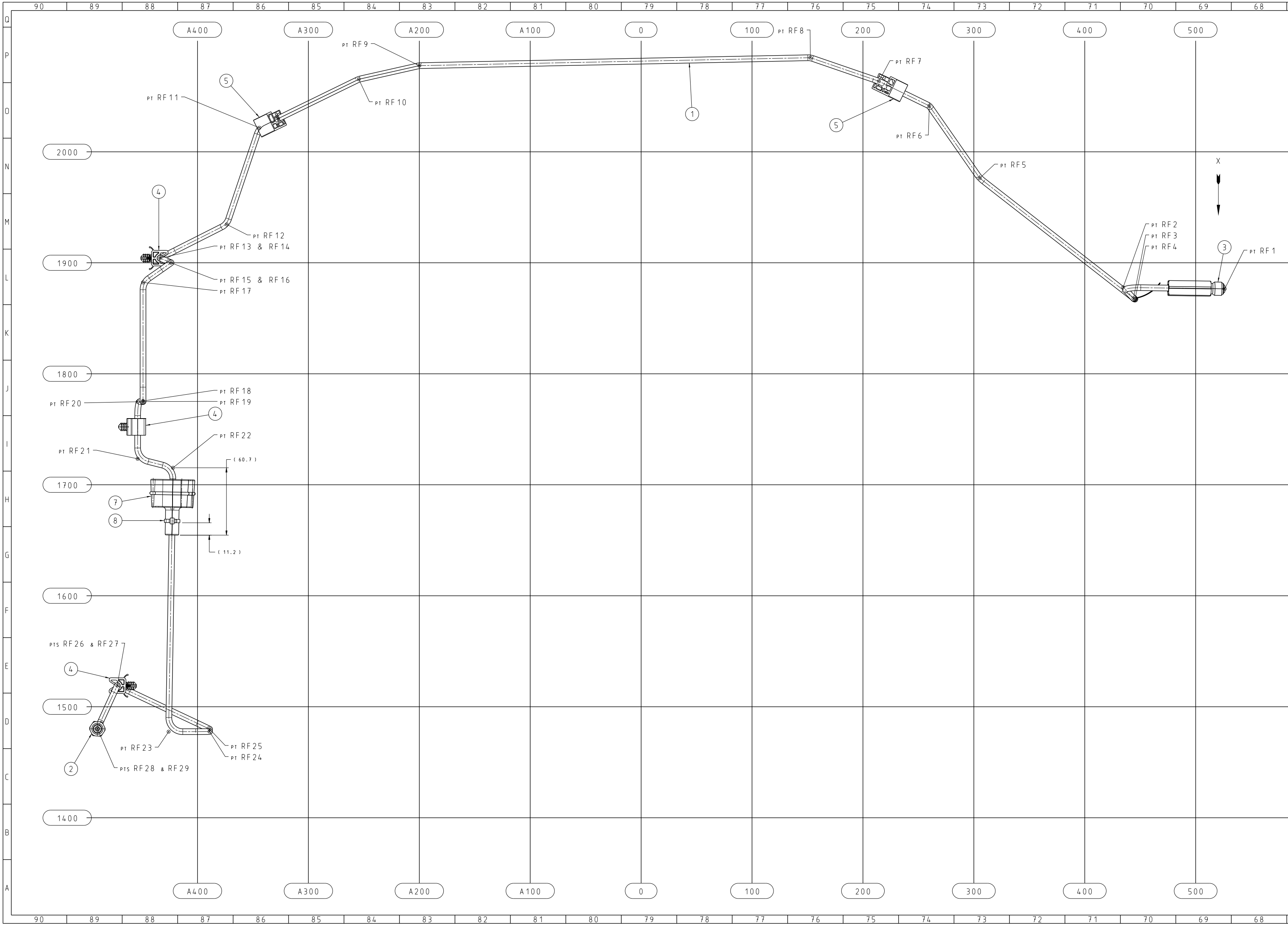
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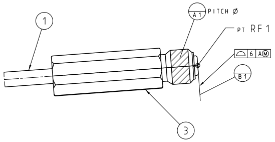
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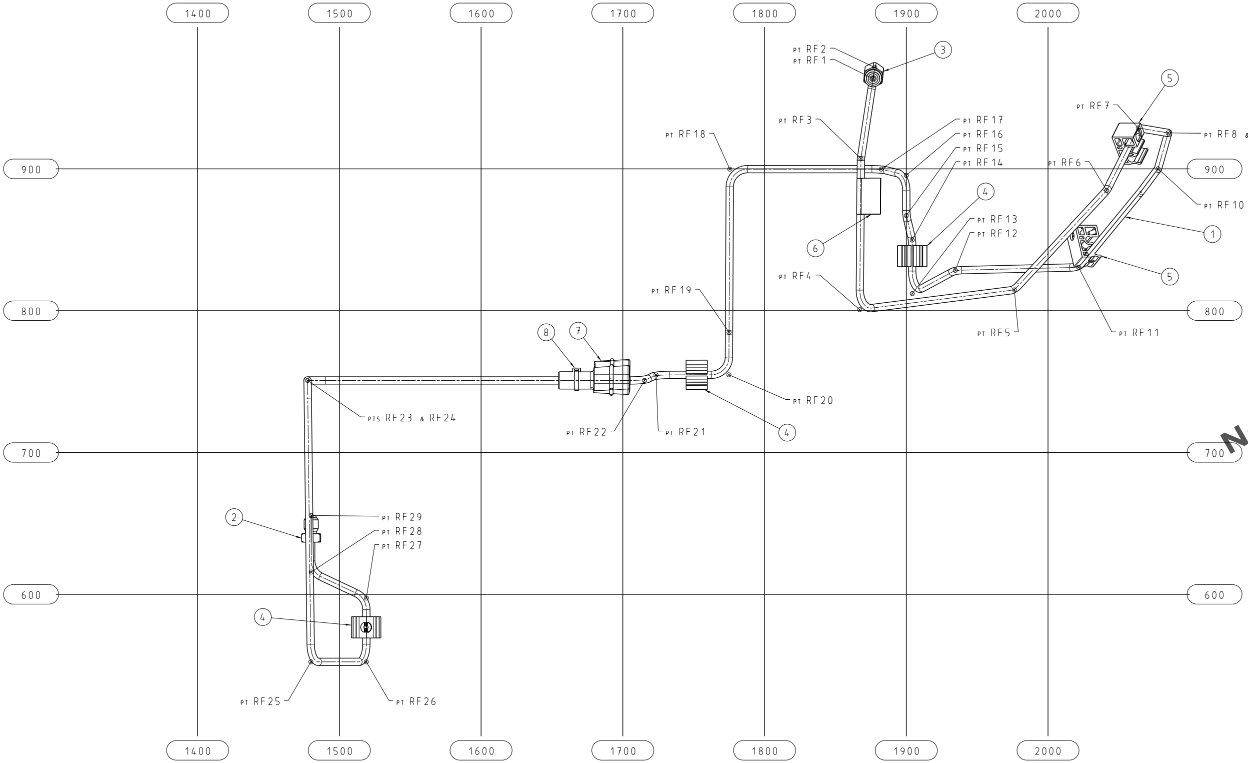
VIEW X
SCALE 2:1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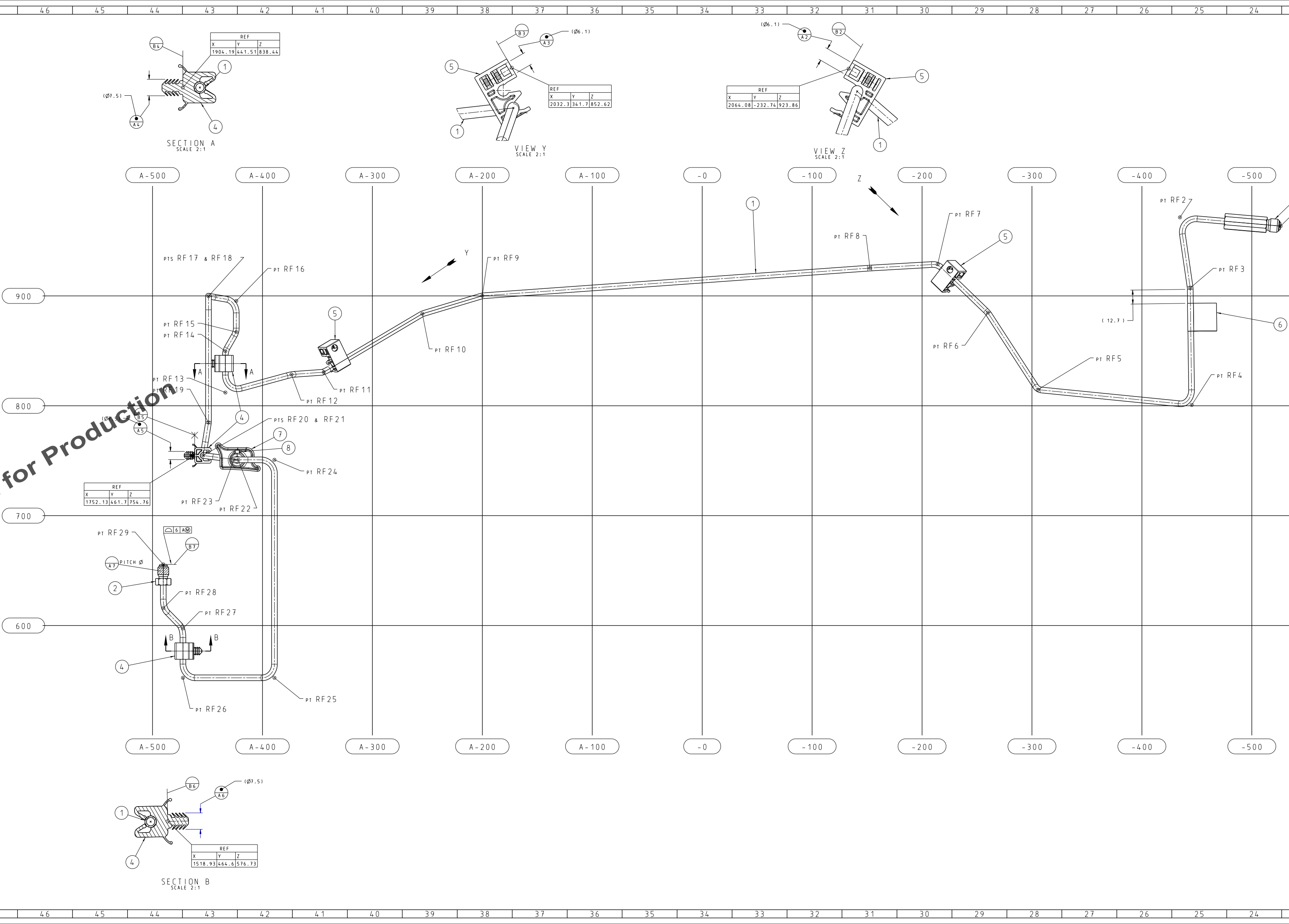
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SECTION A
SCALE 2:1
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SCALE 2:1
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VIEW Z
SCALE 2:1
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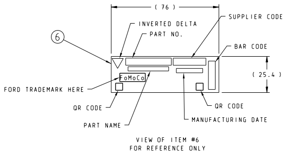
for Production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INVERTED DELTA
PART NO.
SUPPLIER CODE
BAR CODE
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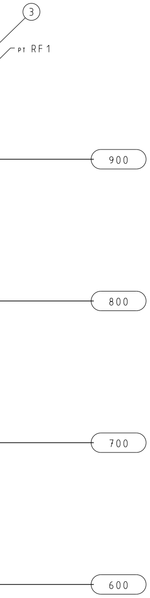
FoMoCo
FORD TRADEMARK HERE
QR CODE
QR CODE
PART NAME
MANUFACTURING DATE

VIEW OF ITEM #6
FOR REFERENCE ONLY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	QTY	ITEM	SUPPLIER PART NO	FORD PART NO	PART NAME	MATERIAL	MATERIAL FINISH	HEAT TREATMENT
	1	1	L1MC-2269-A-PIA-01	N/A	TUB-BRK BULK	4.75 (3/16") SAE J527	GALFAN PER ESA-M1A270-A, PA PER WSS-M21P30-A1	N/A
A1	1	2	BCD0641 (MX202003)		NUT M10 X 1.5, 13MM HEX, 4.75 (3/16") TUBE	SAE J403 GRADE 12L14	ZINC NICKEL ELECTROPLATE 8µM MIN THK (DIPSOLIZA-2500) TRIVALENT CHROMIUM PASSIVATE (DIPSOLAZN-CHROMATE) LUBRICATED SEALER (COLUMBIA ZINC-CHRO-SHIELD) WAX (ADREM615)	
B1	1	3	MX202110		NUT M12 X 1.5, 38MM EXT HEX, 4.75 (3/16") TUBE	SAE J403 GRADE 12L14	ZINC NICKEL PLATING 8µM MIN THK (DIPSOL IZA-2500) TRIVALENT CHROME PASSIVATE (DIPSOL AZN-CHROMATE) LUBRICATED SEALER (ENTHONE ENSEAL 140)	
	3	4	164745-0-00		BRAKE CLIP	WSS-M4D666-B1	N/A	
	2	5	15-004506		BRAKE CLIP	WSS-M4D666-B1		
	1	6	N/A		2D BARCODE LABEL	2D BARCODE LABEL 3.5 X 1, ORANGE PER WSS-M99P41-A33		
A2	1	7	MX201983		FOAM INSULATOR	EPDM, ASTM D1056 2A2		
	1	8	1F0220011_2		TIE STRAP	WSS-M4D666-B1		

LTRS	REVISIONS		
ORIGINATOR	CHECKER	ENGR APP	MATL APP
L1MC-2263-AA NOT RELEASED FOR PRODUCTION RELEASED NL00 E 13346886 023 20170628			
B.GLIDDEN	D.POLEY	SCUTLER5	LKANE4
A1 WAS MX200691 ITEM #2 A2 WAS MX201833 ITEM #7 RELEASED ▽ L1MC-2263-AC NL00 E 13599973 000 20180518			
B.GLIDDEN	D.POLEY	ADUBOI11	LKANE4
B1 WAS MX201910 ITEM #3 B2 REVISED ROUTING ITEM #1 RELEASED ▽ L1MC-2263-AD NL00 E 13626315 000 20180608			
B.GLIDDEN	D.POLEY	ADUBOI11	LKANE4

B2

ITEM #1 LIMC-2269-A-PIA-01 BRAKE TUBE ECN5004522				
POINT IDENT	X	Y	Z	BEND RADIUS
RF1	1876.54	-526.24	963.56	----
RF2	1877.8	-434.6	971.5	12.5
RF3	1867.99	-443.97	907.22	12.5
RF4	1867.12	-445.37	800.75	12.5
RF5	1976.24	-305.32	814.67	12.5
RF6	2041.41	-259.83	884.82	12.5
RF7	2063.65	-214.24	928.86	12.5
RF8	2084.78	-152.63	925.34	12.5
RF9	2077.61	200.01	900.09	12.5
RF10	2065.34	254.56	883.73	12.5
RF11	2021.62	344.22	830.56	12.5
RF12	1934.56	373.6	828.46	12.5
RF13	1904.19	433.75	812.04	12.5
RF14	1904.19	433.77	849.75	12.5
RF15	1900.01	423.83	867.09	12.5
RF16	1900	423.84	895.41	12.5
RF17	1882.31	449.1	899.79	12.5
RF18	1775.51	449.1	899.79	12.5
RF19	1774.95	449.1	784.77	12.5
RF20	1774.81	453.95	754.81	12.5
RF21	1723.41	453.95	754.69	12.5
RF22	1715.31	422.06	750.8	12.5
RF23	1477.53	426.01	750.8	12.5
RF24	1477.59	389.12	750.8	12.5
RF25	1479.9	389.09	552.4	12.5
RF26	1519.06	472.35	552.4	12.5
RF27	1519.06	472.35	597.4	12.5
RF28	1480.14	490.25	615.75	12.5
RF29	1480.14	490.25	655.61	----
C/L LENGTH BETWEEN PTS RF1-RF29 = 2443.18mm				

UNTOLERANCED CHARTED DIMENSIONS ARE BASIC
UNLESS OTHERWISE STATED AS REF ()

MUST CONFORM TO: ENGINEERING SPECIFICATION (ES)
▽ ES-9CPC-2B109-AA DEVIATIONS FROM THIS DOCUMENT SHALL BE APPROVED BY FORD MOTOR COMPANY PRODUCT ENGINEERING PRIOR TO PRODUCTION.

COVER ALL TUBE ENDS

ASSEMBLY SHALL INCLUDE PART NUMBER IDENT TAPE WITH VENDOR IDENT AND LOT CODE

UNLESS OTHERWISE SPECIFIED ALL RADII ARE TO CENTERLINE OF TUBE IN PLANE OF BEND

⌓	6	A Ⓜ	B

AT TERMINATIONS OF ALL TUBE ENDS

⌓	6	A Ⓜ	B

BOUNDARY
AT ALL CHARTED CL POINT IDENTIFICATIONS

THIS PART HAS RECEIVED A TRADEMARK EXEMPTION NUMBER; DG13-00023

PART MUST BE FREE OF BURRS, FLASH AND SHARP EDGES THAT MAY AFFECT THE FUNCTION, SAFE HANDLING, INSTALLATION OR REMOVAL OF THE PART.

SOURCES FOR MATERIALS DEFINED BY FORD MATERIAL SPECIFICATIONS SHALL BE SELECTED FROM THE FORD MOTOR COMPANY ENGINEERING MATERIAL APPROVED SOURCE LIST.

MUST CONFORM TO: EMBRITTLEMENT AVOIDANCE ENGINEERING MATERIAL WORLDWIDE SPECIFICATION (WSS) WSS-M99A3-A. ANY MODIFICATIONS TO THE WSS MUST BE MADE AND APPROVED IN ACCORDANCE WITH MEP-04 (WORLDWIDE MATERLIALS ENGINEERING PROCEDURE (MEP)) PRIOR TO PRODUCTION

PART AS RECEIVED AT THE FORD PLANT OR SERVICE PART PACKAGER/WAREHOUSE SHALL BE FREE OF ANY CORROSION ALIGNED WITH THE FORD CUSTOMER SERVICE DIVISION (FCSD) PACKAGING AND SHIPPING GUIDE. CORROSION INHIBITORS OR FOREIGN MATERIALS DETRIMENTAL TO THE INSTALLATION OR FUNCTION OF THE PART MUST BE REMOVABLE BY THE INTENDED CLEANING METHOD

CHANGES TO DESIGN, COMPOSITION OR PROCESSING OF THE PART PREVIOUSLY APPROVED FOR PRODUCTION REQUIRE PRIOR APPROVAL FROM FORD MOTOR COMPANY PRODUCT ENGINEERING. REFER TO ISO/TS 16949

FOR CURRENT RELEASE STATUS, SEE THE WERS ENGINEERING NOTICE

FOR THE PURPOSES OF GEOMETRIC TOLERANCING, ALL DIMENSIONAL INFORMATION CONTAINED IN THE CAD MODEL IS BASIC (THEORETICAL)

▽ CONTROL ITEM - THE ▽ ALSO IDENTIFIES CRITICAL CHARACTERISTICS DESIGNATED BY THE CROSS FUNCTIONAL TEAMS DEVELOPING THE PRODUCT. THESE, AND ADDITIONAL CRITICAL CHARACTERISTICS IDENTIFIED BY PROCESS REVIEWS, MUST APPEAR ON THE CONTROL PLANS ACCORDING TO ISO/TS 16949. THESE CONTROL PLANS REQUIRE PRODUCT ENGINEERING APPROVAL

MARTINREA

MARTINREA INT. INC. 248-823-5700
2800 LIVERNOIS RD. TROY, MI. 48083

ENG APP	D.POLEY	APP DATE	20161003
GSDB CODE P444	SUPPLIER PART NUMBER L1MC-2263-AD_ECN4646		
REFERENCE	N/A		
PART MUST COMPLY WITH RESTRICTED SUBSTANCE MANAGEMENT STANDARD WSS-M99P9999-A1 TO SAFEGUARD HEALTH, SAFETY AND THE ENVIRONMENT			
DRAFTED IN ACCORDANCE WITH FORD MOTOR COMPANY ENGINEERING CAD AND DRAFTING STANDARDS VERSION 29	3RD ANGLE PROJ DIMENSIONS ARE IN MILLIMETERS		
CAD TYPE K-CATIA5	CAD LOC. TC	CAD FILE L1MC-2263-A-DWG-01	DTMC IS MASTER
OPER. NO. N/A	UNIT N/A	DRAWING ▽ L1MC-2263-AD	
DESIGN B.GLIDDEN	DETAIL B.GLIDDEN	TITLE TUB ASY FRT WHL BRK	SHT 1 OF 1
CHECKED D.POLEY	SAFETY MFG USE		N/A
SCALE 1:1	DATE 20161003	DIVISION N/A PLANT N/A	

FORD MOTOR COMPANY

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