SPEC	
EC	O
COMPASS	O (COLOR: GREEN)
MICROPHONE	X
HOMELINK	O (BACKLIGHT: WHITE)
SMARTBEAM	X
RCD	X
PRNDL LAMP	X
PG	X

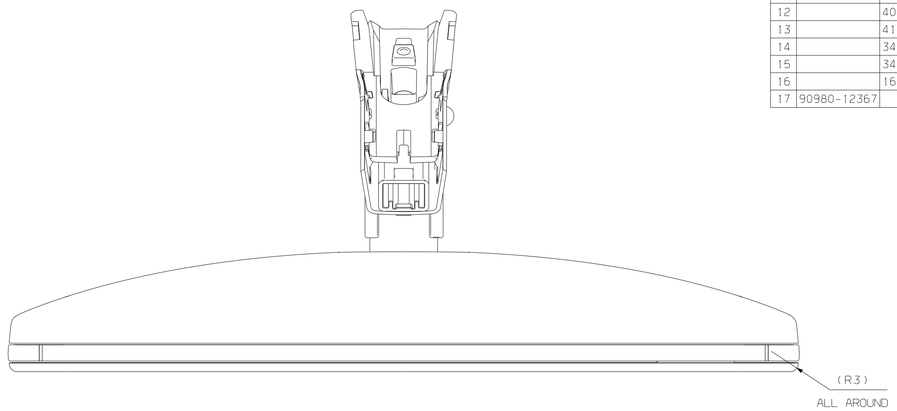
MATING CONNECTOR ON VEHICLE HARNESS	
HOUSING	TOYOTA P/N 90980-12368
TERMINAL	TOYOTA P/N 90980-09895

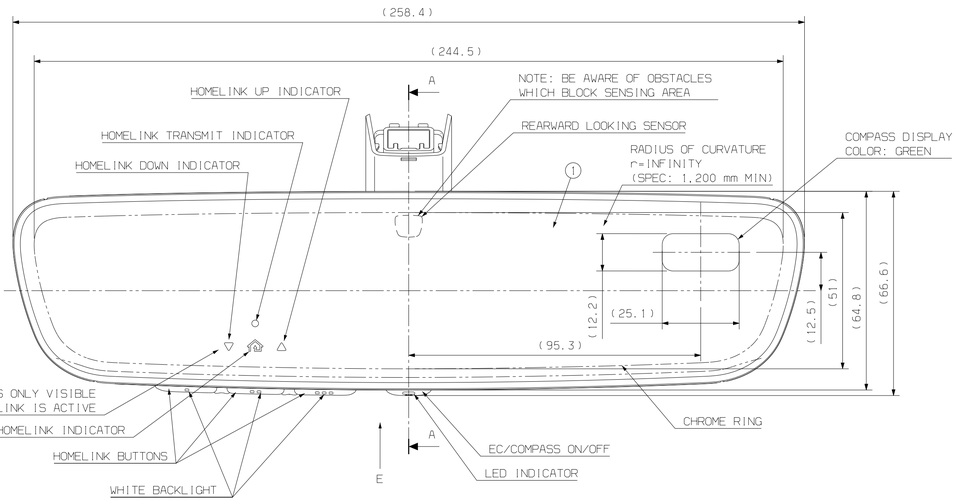
NO.	TOYOTA P/N	GENTEX P/N	PART NAME	MATERIAL	SURFACE TREATMENT	QUANTITY	MATERIAL TS
1	87809-0WC40		CELL SUB-ASSY, INNER MIRROR W/DRIVER			1	
2		340-1272	CASE FRONT S.A., INCLUDING BUTTONS	PC+ABS (COLOR: BLACK)	GNTX-130	1	TSM5526G-1L
3		340-1223	CASE REAR	PC+ABS (COLOR: BLACK)	GNTX-130	1	TSM5526G-1L
4		343-0203	LENS, AMBIENT	POLYCARBONATE		1	TSM5513G-1
5		350-0142	MOUNT	ZINC	BLACK PAINT	1	
6		355-0010	TUBE	STEEL	BLACK PAINT	1	
7		350-0169	PIVOT BALL	ZINC	BLACK PAINT	1	
8		345-0822	BEARING CUP, MOUNT	PP TALC		1	
9		345-0821	BEARING CUP, PIVOT	HDPE		1	
10		418-0071	SPRING	STEEL		1	
11		409-0013	WASHER	ALUMINUM		1	
12		400-0037	SCREW, TORX	STEEL	BLACK PAINT	1	
13		412-0010	SCREW	STEEL		1	
14		345-0868	WIRE CLIP	ACETAL		1	
15		345-0899	LOWER WIRE COVER	PC+ABS	GNTX-130	1	TSM5526G-1L
16		161-0161	BUTTONS	SILICONE RUBBER		1	
17	90980-12367		HOUSING, CONNECTOR MALE			1	

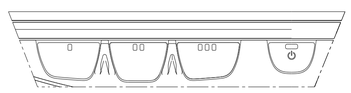
CAD	SAMS	ISS	REV	MASS	REV. NO.	REVISION RECORD	E.C.NO.	DATE	REVR
		1	540g		1	RELEASE FOR PRODUCTION PER R.D.D.P.:TYBK-5609	603WSY017	7/31/2013	SLOTERBEEK

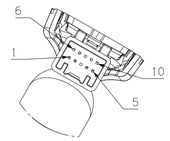
NOTES:

1. THIS PART MUST COMPLY TO FMVSS #111, #302 AND FCC/IC/IFETEL. (R)
2. THIS PART MUST COMPLY TO TEST SPECIFICATION IN TABLE A.
3. MOUNTING SCREW TORX T-20 TORQUE SPEC: 1.1- 1.9 NM.
4. EXTERIOR SURFACES TO BE TEXTURED AS INDICATED PER GNTX-130 OR EQUIVALENT. A MASK OF 0.38mm (WIDTH) PERMITTED ON PARTING LINES.
5. THIS MIRROR SHALL COMPLY WITH TSH3130G EXCLUDING SPOT AND FRICTION TEST.
6. 0.25mm MISMATCH ALLOWED IN INSERTED AREAS.
7. PIVOT ADJUSTMENT TORQUE
 PIVOT A= 0.88 NM TO 3.30 NM
 PIVOT B= 1.80 NM TO 4.60 NM
 PIVOT B TORQUE SHALL BE GREATER THAN PIVOT A BY 0.10 NM MIN.
 ADJUSTMENT ANGLE SHOWN IS FOR AN INDEPENDENT PIVOT FROM NEUTRAL POSITION. ADJUSTMENT AT A PIVOT IN COMBINATION WITH ADJUSTMENT OF OTHER PIVOT COULD RESULT IN INTERFERENCE.
8. THIS PART SHALL CONFORM TO SUB-PARAGRAPH "SUBSTANCE PROHIBITION AND RESTRICTION" IN TSZ0001G.
9. THIS PRODUCT INCORPORATES HOMELINK V UNIVERSAL TRANSCEIVER.
10. THE VOLUME OF PART VOC MUST COMPLY TO TIS 01204-00232.
11. THIS PRODUCT IS COMPENSATED FOR USE ON VEHICLES WITH NORMAL GLASS.
12. PARTS SHALL CONFORM TO TSZ6005G. (NOT APPLICABLE. PLASTIC AND RUBBER PARTS OF THIS PRODUCT ARE LESS THAN 100g)
13. BUTTONS SHOULD NOT STICK THROUGH -30°C TO +80°C TEMP RANGE.
14. THIS COMPASS SETTING IS FOR THE DRIVER POSITIONED ON THE LH SIDE OF THE VEHICLE.



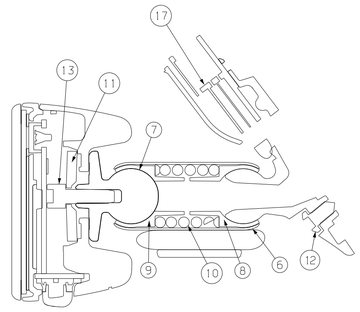



VIEW IN DIRECTION OF ARROW E

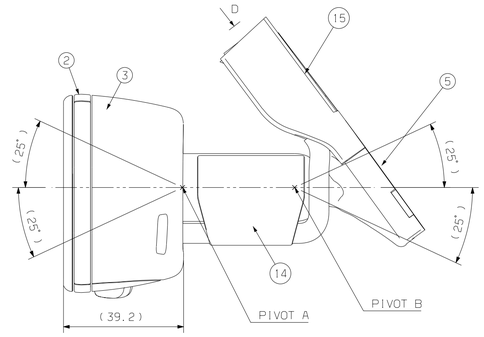


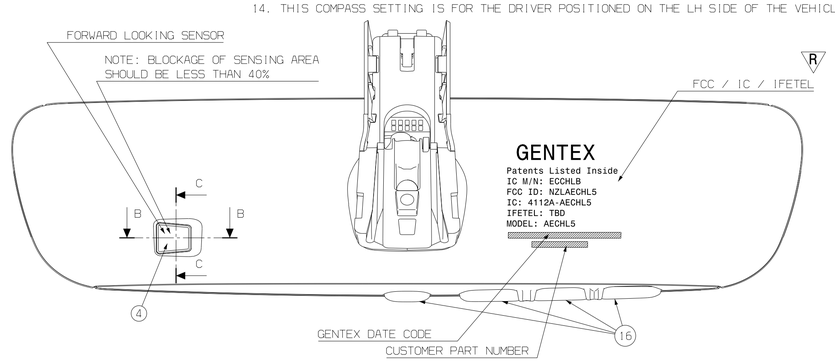
TOYOTA P/N 90980-12367
VIEW IN DIRECTION
OF ARROW D

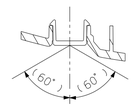
PIN	FUNCTION	CURRENT
1	IGNITION	1500mA MAX
2	GROUND	1500mA MAX
3	REVERSE	15mA MAX
4	OEC FEED (+)	300mA MAX *
5	OEC FEED (-)	300mA MAX *
6	BATTERY	300mA MAX
7	OPEN	NA
8	OPEN	NA
9	OPEN	NA
10	OPEN	NA
*PER ELEMENT		



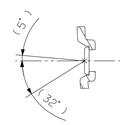
SECTION CUT A-A







SECTION CUT B-B
SENSOR AREA OF
FORWARD LOOKING SENSOR



SECTION CUT C-C
SENSOR AREA OF
FORWARD LOOKING SENSOR

TABLE A:

No.	Test Item	Test Method	Criteria	Responsibility: Supplier	Responsibility: Toyota
1	Mirror quality	As per TSC 3900G	As per TSC 3900G-1 (bubbles, inclusion, scratch and others).	0	
2	Mirror curvature	As per TSC 3900G	Concave face: R9000 MIN. Convex face: R3000 MIN.	0	
3	Mirror distortion factor	As per TSC 3900G	Within 2%	0	
4	Mirror angle adjustment range	As per TSC 3900G	Instruction in the drawing MIN.	0	
5	Mirror angle adjustment force	As per TSC 3900G	See Note #7.	0	
6	Chattering	As per TSC 3900G (Sweep from 20 to 200 Hz)	In range of the following graph (shaded area).  Report results only. Actual pass/fail per vehicle test (No. 20).	0	
7	Wobbling	As per TSC 3900G	Shall be 1mm MAX.	0	
8	Angle adjustment durability	As per TSC 3900G (1500 cycles)	#4 to #7 shall be met.	0	
9	Vibration durability	As per TSC 3900G (4 hours vertical, 2 hours lateral, 2 hours longitudinal)	(1) Initial sample: #1 and #4 to #7 shall be met. No such defects as discoloration and cracking shall be found on the mirror surface. (2) High temp exposed sample: Rotational looseness shall not occur at the fastening part. #7 shall be met.	0	
10	Thermal cycle	As per TSC 3900G (-30° C X 7.5h, +23° C X 0.5h, +80° C X 15.5h, +23° C X 0.5h) X 4 cycles	Same as those in #9 (1).	0	
11	High temperature storage	As per TSC 3900G (+80° C X 240 hours)	Same as those in #9 (1).	0	
12	Low temperature storage	As per TSC 3900G (-30° C X 240 hours)	Same as those in #9 (1).	0	
13	Light resistance	As per TSL 0601G METHOD E	#1 shall be met. No such defects as discoloration and cracking shall be found on the mirror surface.	0	
14	Ozone resistance	As per TSC 3900G (Ozone Weatherometer; 72 hours)	Same as those in #13.	0	
15	Chemical resistance	As per TSC 3900G	Same as those in #13.	0	
16	Steam resistance	As per TSC 3900G (+90° C x 5 hours)	#1 shall be met.	0	
17	Energy absorbing	As per TSC 3902G	As per TSC 3902G-1	0	
18	Flammability	Per FMVSS 302	Burning speed 10 cm/min. MAX.	0	
19	Change in color by aging	As per TSL 0601G METHOD E	Measured color value: E*; 3.0 MAX.	0	
20	Chattering (vehicle drive test)	As per TSC3907G	Sensory evaluation: Grade 3 or better.		0

CAD DATA IS MASTER					
3D DATA LEVEL	DA	DATA PATTERN	0:2D 1:3D+2D	(R)2	

ECI NO.	REVISION RECORD	MASS	MASS TOL.
603WSY017	RELEASE FOR PRODUCTION PER R.D.D.P. TYBK-5609	540g	±MC

TOYOTA PART NAME	TOYOTA PART NO.	
MIRROR ASSY, INNER RR VIEW	87810-0WM20	1/1

APPROVED	CHECKED	CHECKED	
TYBK5	TOYOTA AUTO BODY CO., LTD		A1

APPROVED MIKE DEHAAN	DATE 7/31/2013	GENTEX CORPORATION 600 NORTH CENTENNIAL ST ZEELAND, MICHIGAN 49464 (616) 772-1800	
INTERPRET DIM AND TOL PER ASME Y14.5M - 1994	NVS SYMBOLS SPECIFY FEATURES REQUIRING SPECIAL CONSIDERATION. SEE CONTROL PLAN.	TITLE MIRROR ASSY, INNER RR VIEW	
THIRD ANGLE PROJECTION	DRW BY E.SLOTERBEEK	SIZE A1 / DWG NO CP 87810-0WM20 / REV 1	
	DATA FORMAT Catia V5	SCALE 1:1 / DATE 7/31/2013 / SHEET 1 OF 1	