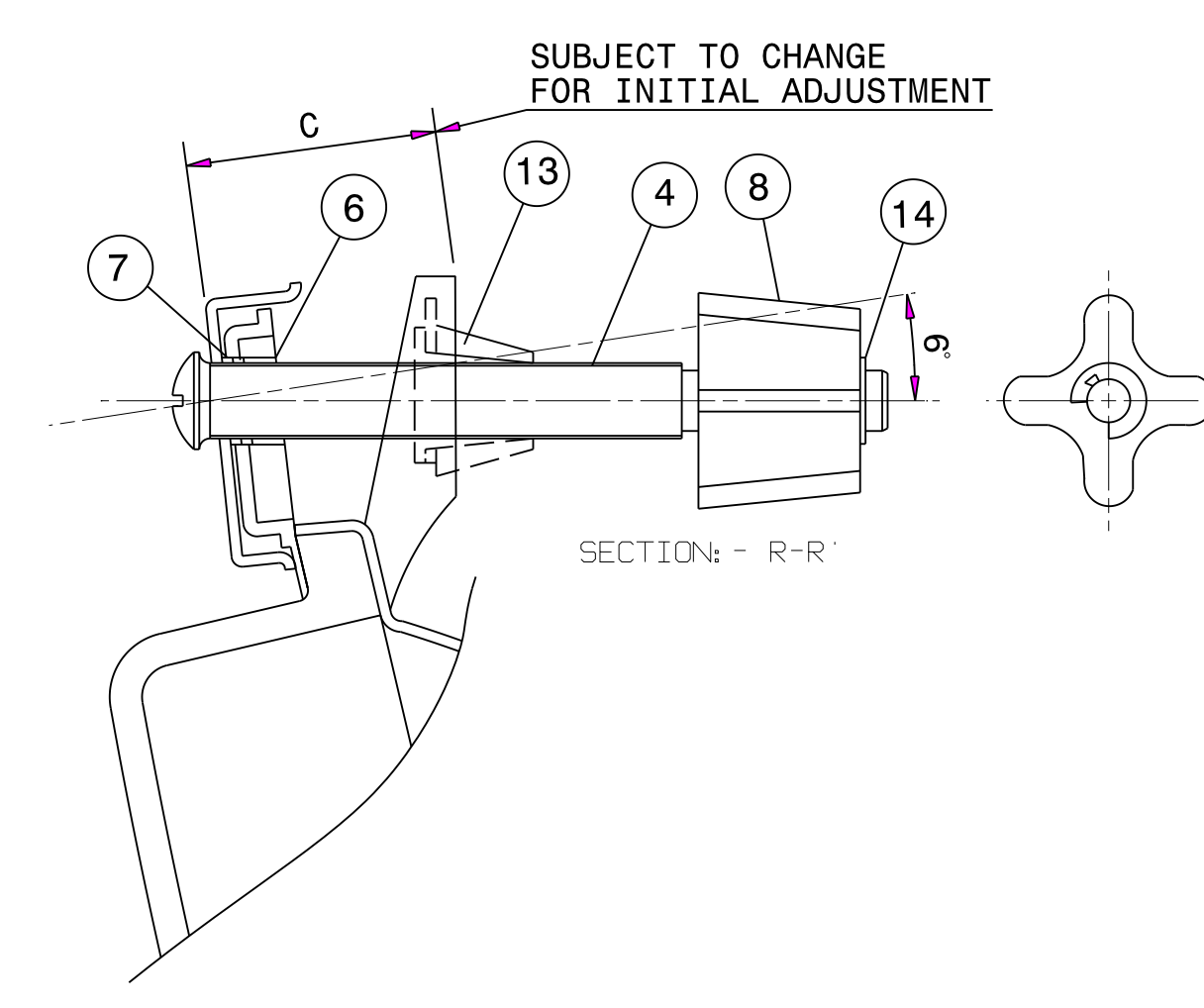
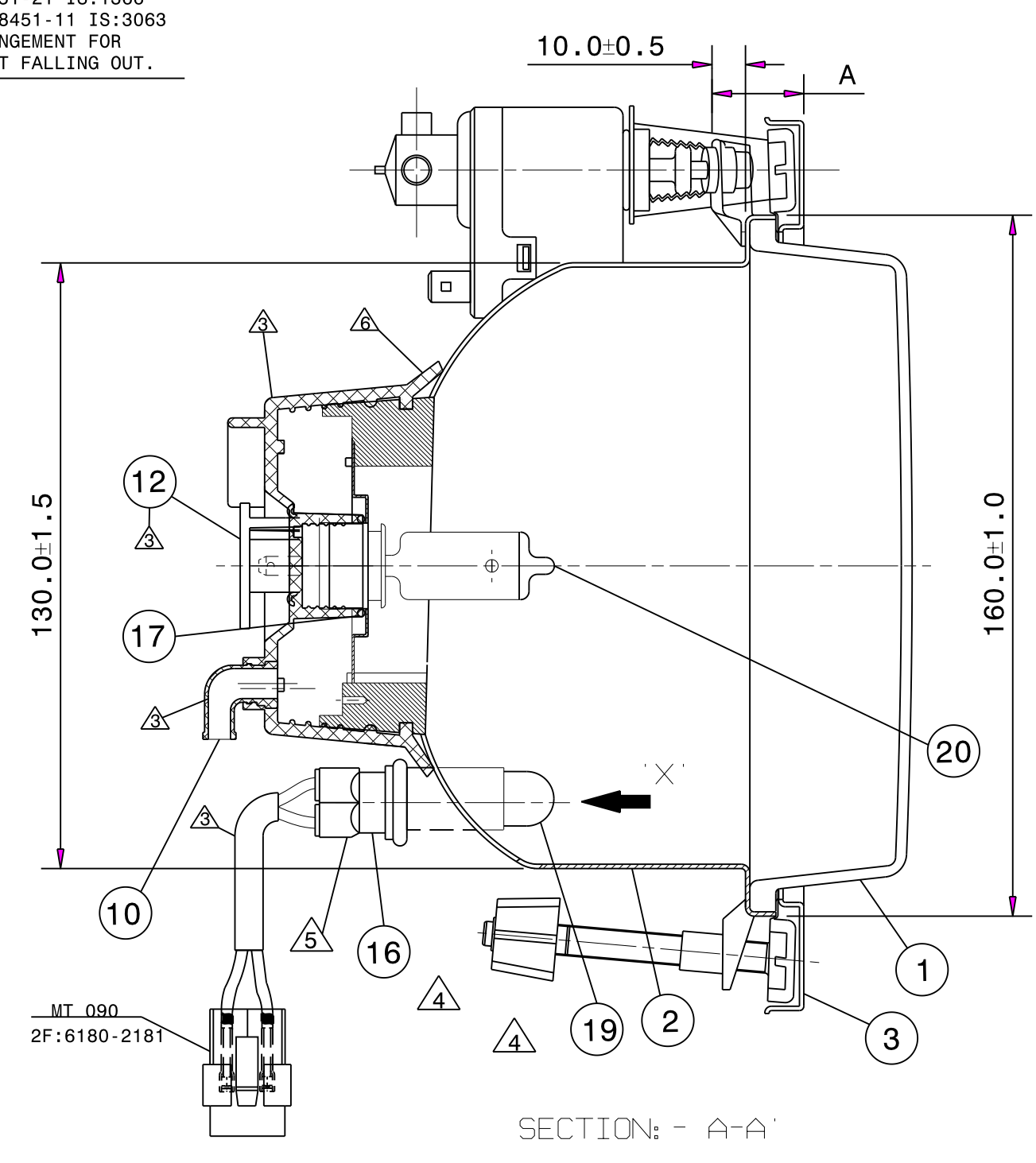
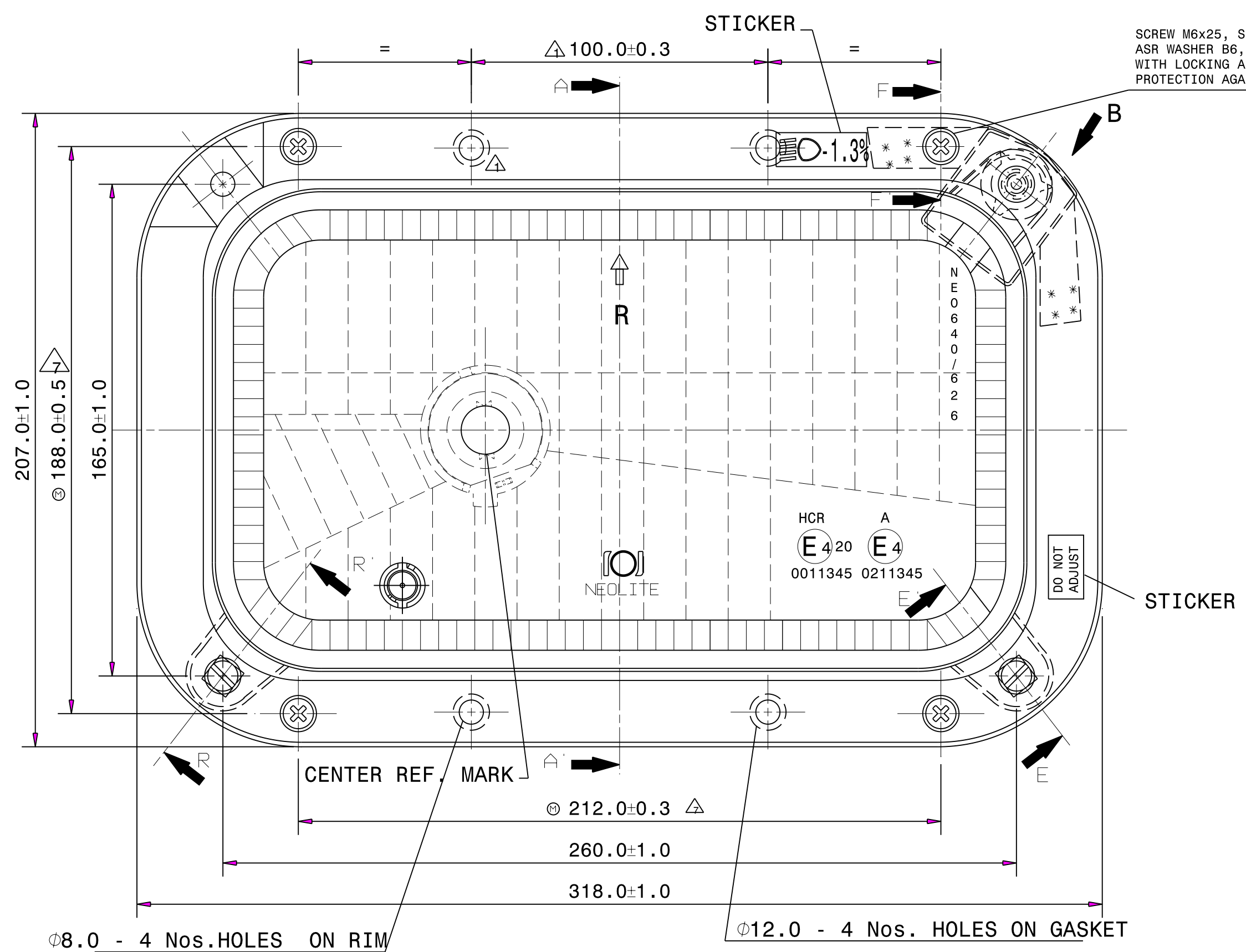


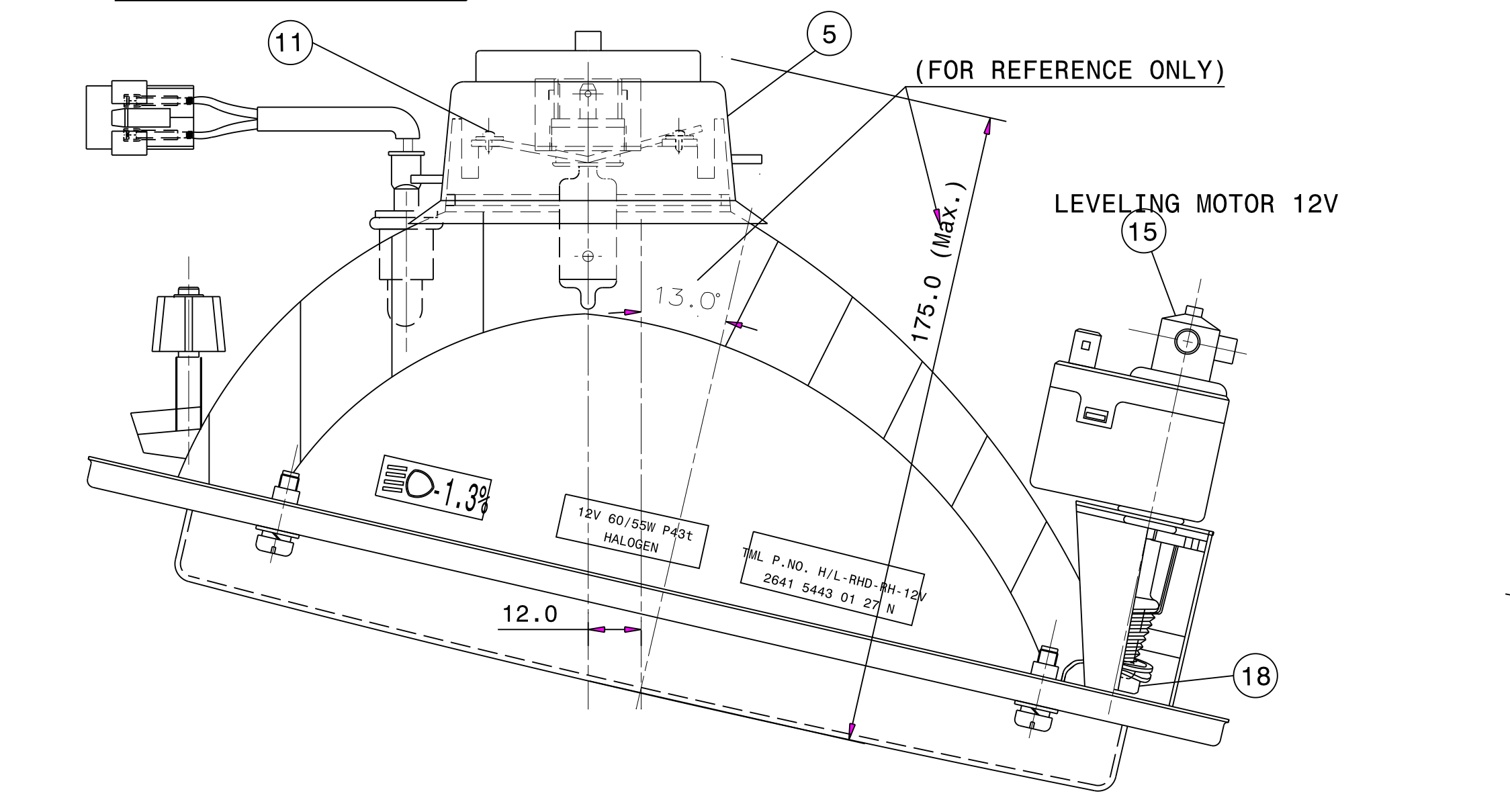


TYPE OF LAMP ASSY.	REQUIREMENTS
MAIN BEAM	ILLUMINATION (LUX) AT 25m DISTANCE/ ILLUMINATION INTENSITY (CD) REQUIREMENTS
DISPERSED BEAM	ILLUMINATION (LUX) AT 25m DISTANCE/ ILLUMINATION INTENSITY (CD) REQUIREMENTS
LIGHT DISTRIBUTION TO BE UNIFORM WITH NO DARK PATCHES.	

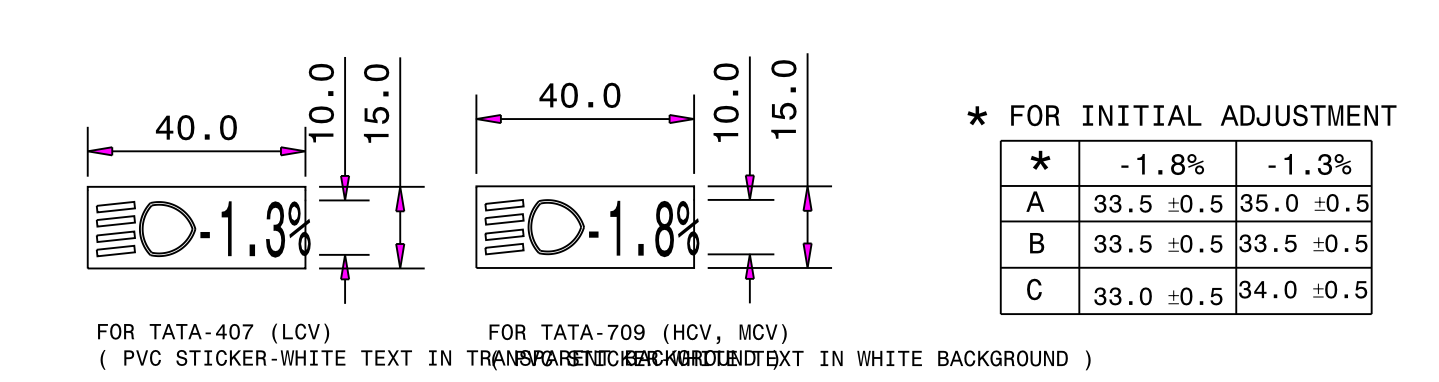
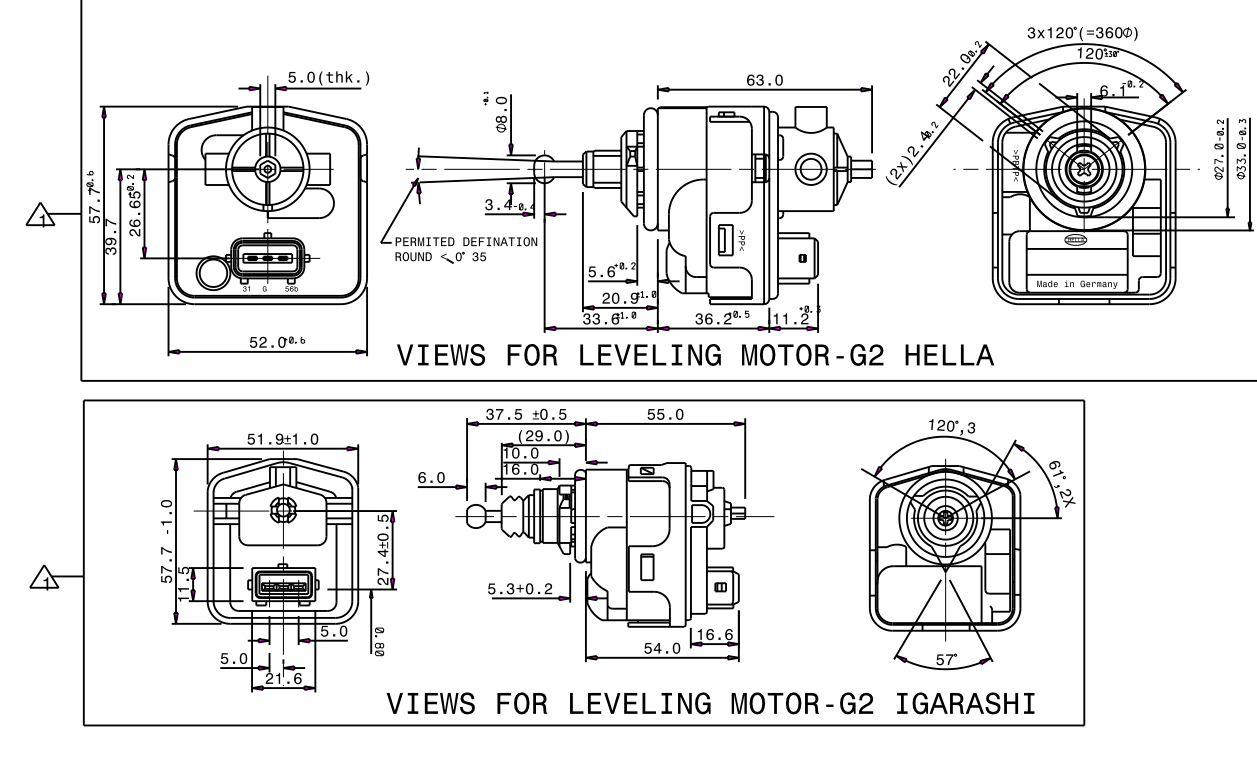
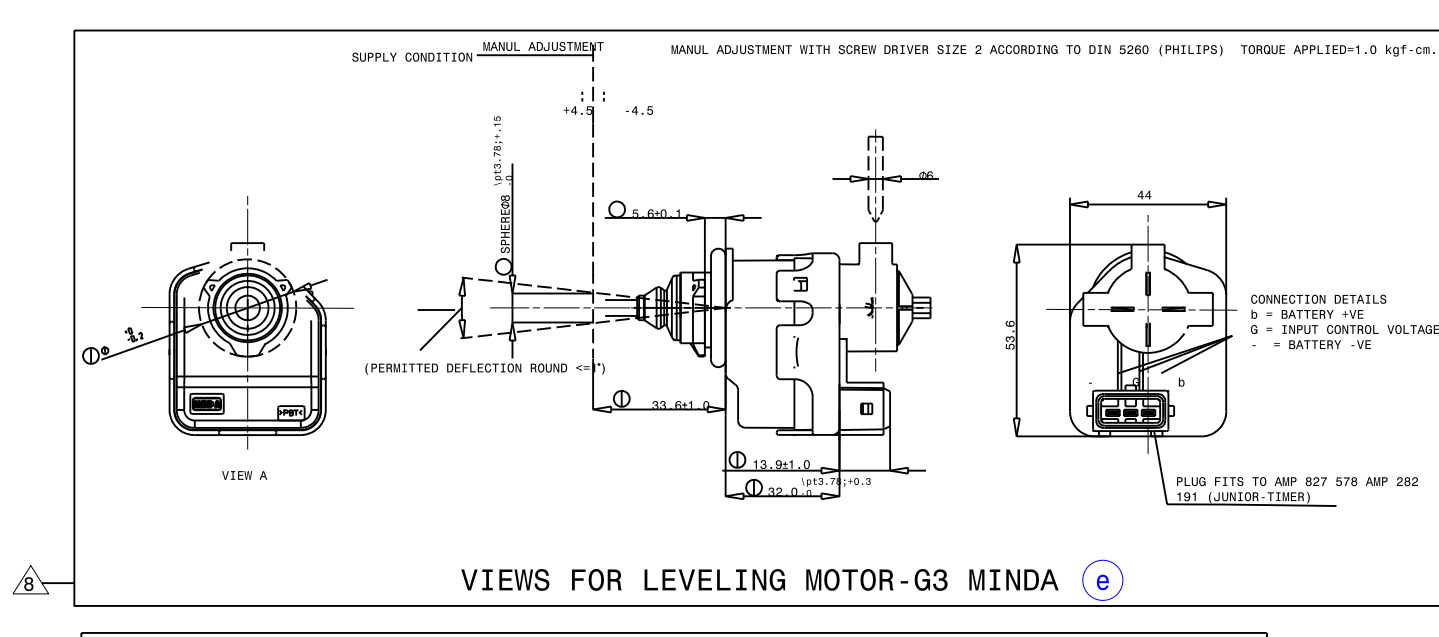
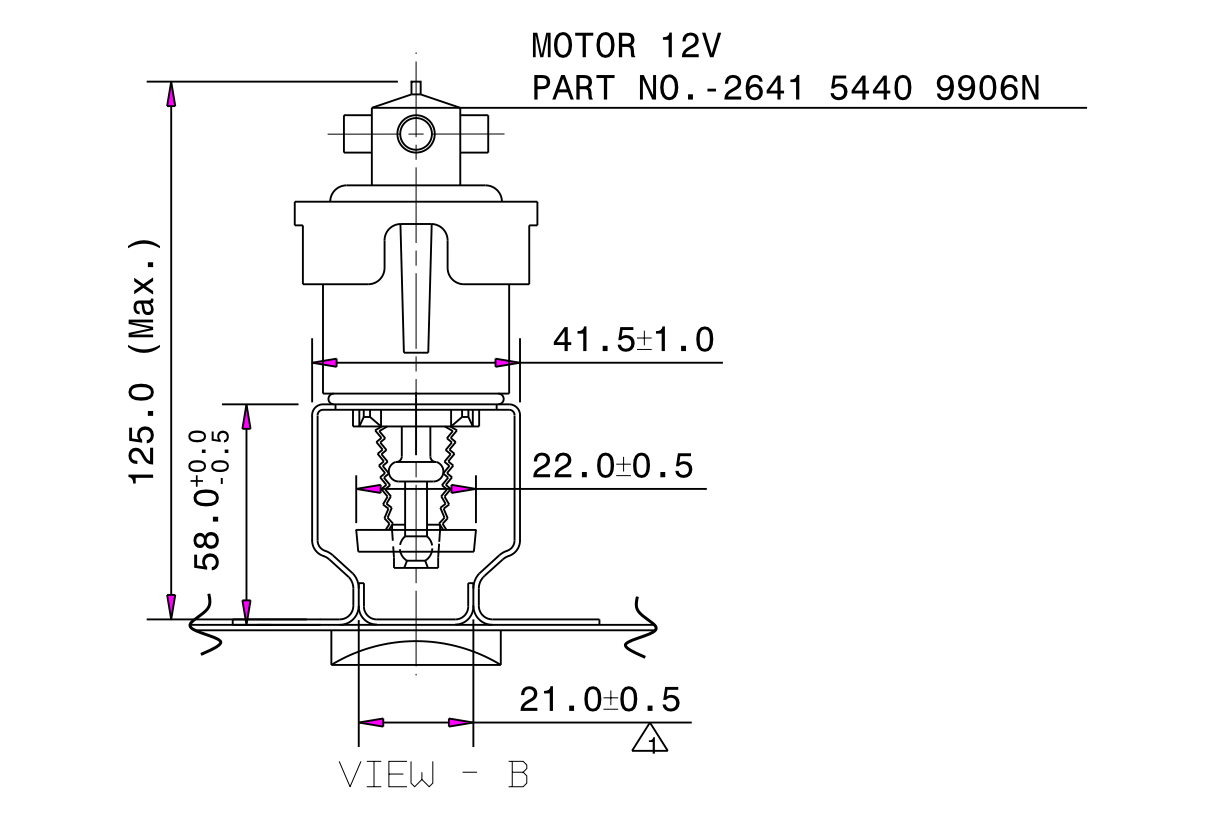
TECHNICAL DATA FOR H/L LEVELING MOTOR (12V/24V) GEN -2

- SUPPLY VOLTAGE - 12/24V DC
- VOLTAGE RANGE - 9.0V TO 14.5V DC FOR 12V
20V TO 30V DC FOR 24V
- STORAGE TEMP. - -40C TO +95C
- OPERATING TEMP. - -30C TO +85C
- FEED BACK - OHMIC
- MAX. STORAGE - 8mm
- ERROR IN AIMING POINT - < ±0.2mm
- ACTUATOR FORCE - 20N AT 10V DC AMBIENT TEMP.
40N AT 15V DC AMBIENT TEMP.
20N AT 20V DC AMBIENT TEMP.
40N AT 30V DC AMBIENT TEMP.
- SERVICE LIVE TEST - 6000 CYCLES AT AMBIENT TEMP.
3000 CYCLES AT -25C
1000 CYCLES AT +80C
- DUST & WATER TEST - IP54K4 DIN 40050-9
- CORROSION - 168 h DIN 50021 SS.
- CLIMATE - 6 CYCLES DIN 50018-KW 2-OS
- AUTOMOTIVE TRANSIENTS - IMPULSE 1-4 AT ISO 7637-2
IMPULSE 5-Vs < 75V / t < 350ms FOR 12V
IMPULSE 1-4 AT ISO 7637-2
IMPULSE 5-Vs < 150V / t < 350ms FOR 24V

REV.	ECN No.	MODIFICATION	DATE	DRN.	CHK.	APPD.
1	572	GASKET HOLE WITH DIN 100-01-0 MOTOR OUTER DIM. 164.1 99.51, 152.01-0, LEVELING MOTOR (GARASHI & MAIN BEAM MALONIX & HELLA & GARASHI MOTOR VIEW WITH DIM ADDED. MOTOR BMT CHANGED TO MODIFIED BMT, MOTOR BMT DIM 22.0 211.8 & MOTOR BMT DIM 20.5 CHANGED TO COUPLER & TERMINAL ADDD INSTEAD OF BULLET TERMINAL.	21.04. 06	D.K.	J.K	T.UBH
2	625	TABLE OF PHOTOMETRIC REQUIREMENT ADDED.	22.01. 07	D.K.	D.S.OT	UMH
3	674	GROOVE ADDED IN REFLECTOR FOR CAP FITMENT. RUBBER CAP MODIFIED, BULB CAP CHANGED, RUBBERIZED PARKING HOLDER CHANGED & AIR VENT PIPE POSITION MOVED.	27.03. 07	AMAN	D.S.OT	UMH
4	723	ONE MORE ROUND HD. SCREW M6x70, KNOB & SNAP RING ADDED & ROUND HD. SCREW M6x55 DELETED.	26.12. 07	K.K.	D.S.OT	P.S.
5	860	EPDM PARKING HOLDER CHANGED TO NYLON PARKING HOLDER & SELECTION 'O' RINGS/GUM SEAL ADDED IN PARKING HOLDER ASSY.	26.09. 08	K.K.	B.S.	S.S.
6	872	RUBBER CAP DRG. NO. CHANGED FROM 3HL-509-004 TO 3HL- 640-004, ONE VENT HOLE REMOVED & LIP ADDED.	06.10. 08	K.K.	B.S.	S.S.
7	1015	3HL-640-004, ONE VENT HOLE REMOVED & LIP ADDED. 3HL-640-004, ONE VENT HOLE REMOVED & LIP ADDED. 3HL-640-004, ONE VENT HOLE REMOVED & LIP ADDED.	20.09. 08	K.K.	B.S.	S.S.
8	1015	3HL-640-004, ONE VENT HOLE REMOVED & LIP ADDED. 3HL-640-004, ONE VENT HOLE REMOVED & LIP ADDED. 3HL-640-004, ONE VENT HOLE REMOVED & LIP ADDED.	19.01. 09	K.K.	B.S.	S.S.

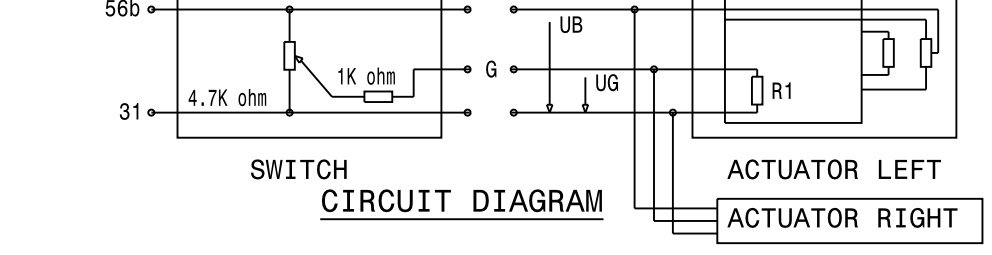


COUPLER SUMI TOMO
HOUSING: MT 090 HOU. F: 1500-0110
TERMINAL: MT090 GUM SEAL: 7160-6234

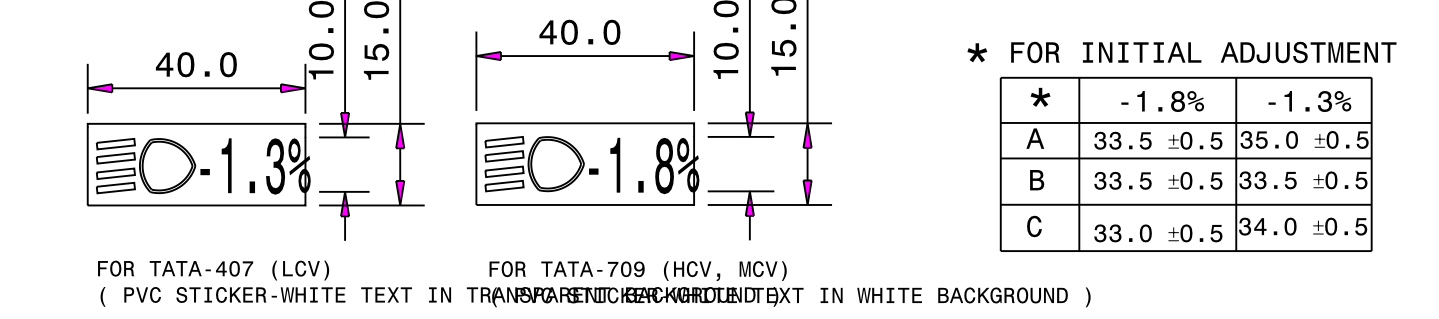
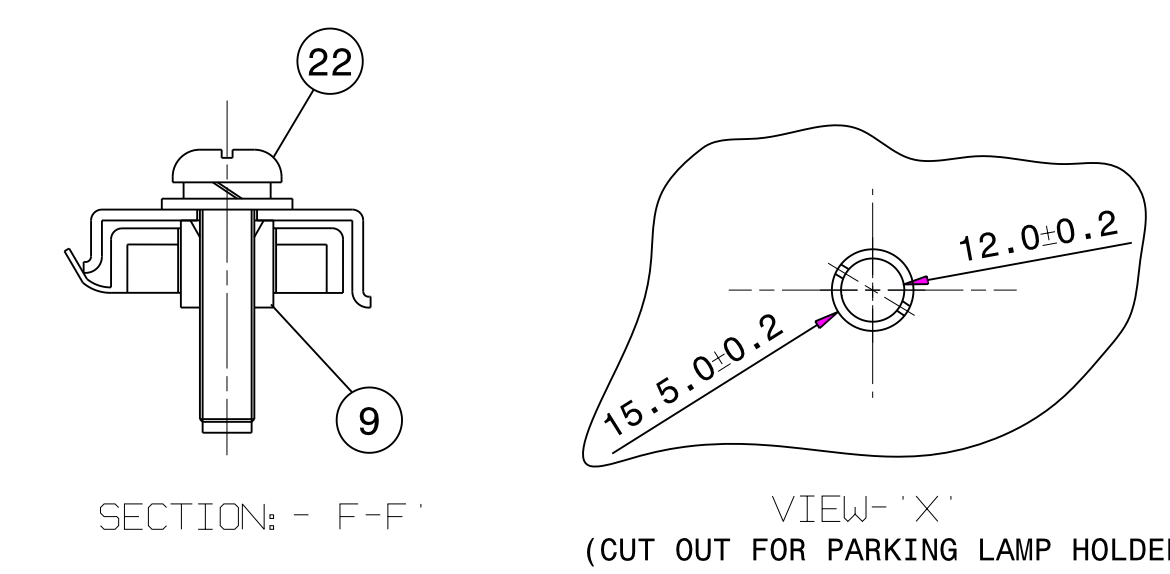
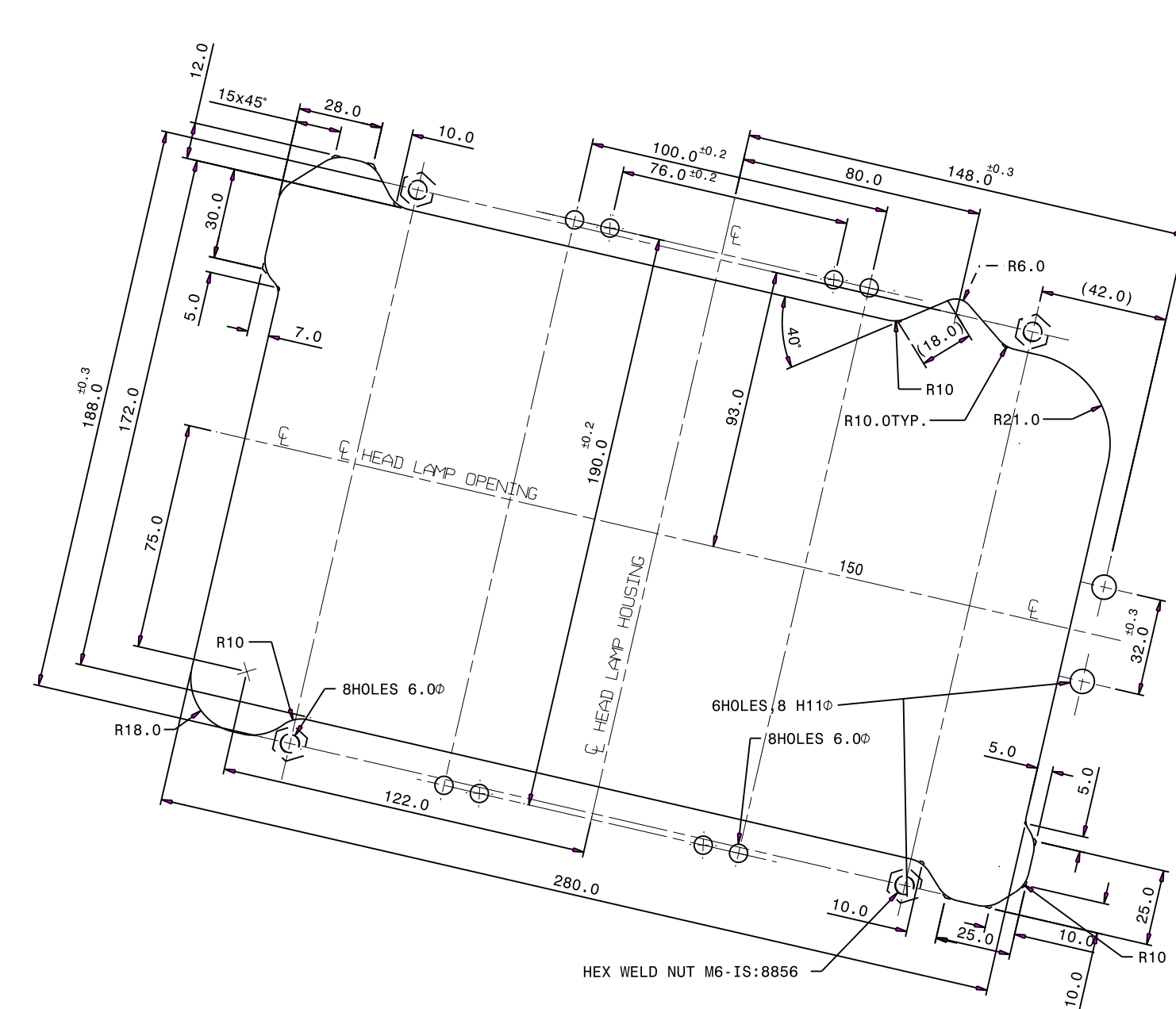
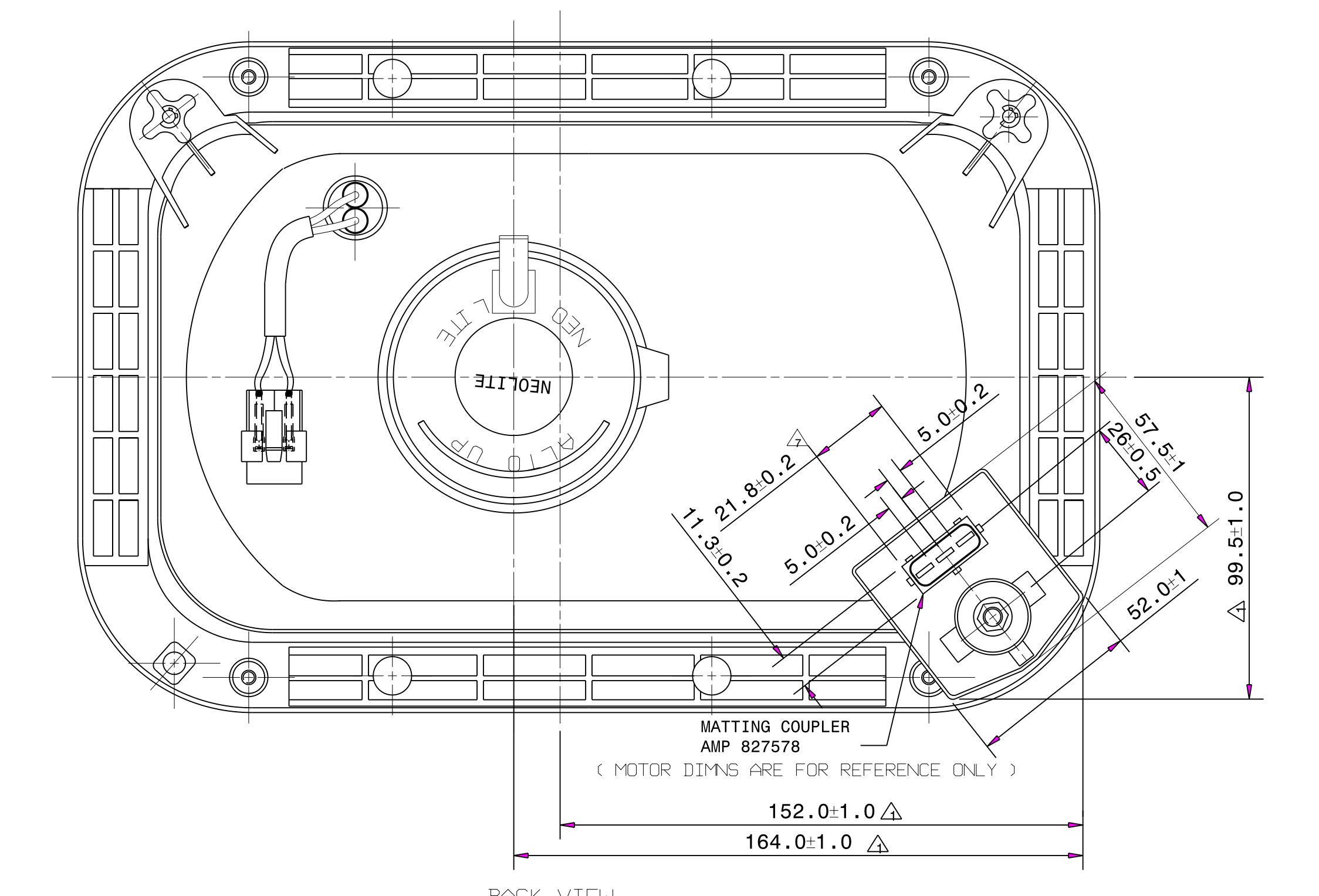


CYCLE TEST - SINGLE ACTUATOR 2 POSITION

TEMP °C	CYCLES	POSITION No. 1	PAUSE TIME	POSITION No. 2
RT (+23°C)	6000	30 Sec.	60 Sec.	30 Sec.
-25°C	3000	30 Sec.	60 Sec.	30 Sec.
+80°C	1000	180 Sec.	180 Sec.	180 Sec.



NOTES:-
1) LAMP H/L AS PER ECE-37.
2) HEAD LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.
3) LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.
4) LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.
5) LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.
6) LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.
7) LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.
8) LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.
9) LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.
10) LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.
11) LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.
12) LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.
13) LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.
14) LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.
15) LAMP SHOULD MEET TEST REQUIREMENTS OF TS 15255, AIS 012, AIS 008.



★	-1.8%	-1.3%
A	33.5 ±0.5	35.0 ±0.5
B	33.5 ±0.5	33.5 ±0.5
C	33.0 ±0.5	34.0 ±0.5



DETAIL FOR HEAD LAMP LEVELING

S. No.	LOADING CONDITION	SWITCH POSITION	INITIAL HEAD LAMP INCLINATION	REQUIRED HEAD LAMP ADJUSTMENT ON VEH.	FINAL HEAD LAMP ANCLINATION	MOTOR- VOLTAGE FROM SWITCH TO TER. G
1	UNLADEN VEHICLE -DRIVER-CODRIVER					
2						
3	FULLY LADEN VEHICLE					

Notes:- a) VERTICALLY UPWARDS+VE. VERTICALLY DOWNWARDS-VE.
b) ALL INCLINATIONS ARE W.R.T. TO GROUND.

MOTORIZED REMOTE LEVELING ARRANGEMENT

S. No.	DESCRIPTION ASSY. HEAD LAMP : 407/709 TYPE HEAD LAMP	TM PART NO.	LEVELING ADJUSTMENT	HIGH / LOW BEAM BULB	PARKING BULB	MOTOR	NEOLITE PART NO.
1	ASSY. E' CERT. HEAD LAMP RHD	LH 2780 5440 0115 N					
2	W/E' Marked Bulbs	RHD 2780 5440 0116 N					
3	(12V) -1.8%	LHD					
4	ASSY. E' CERT. HEAD LAMP RHD	LH 2809 5444 0117 N					
5	W/E' Marked Bulbs	RHD 2809 5444 0118 N					
6	(24V) -1.8%	LHD					
7	ASSY. E' CERT. HEAD LAMP RHD	LH 2641 5443 01 28 N					
8	W/E' Marked Bulbs	RHD 2641 5443 01 27 N					
9	(12V) -1.3%	LHD					
10	ASSY. E' CERT. HEAD LAMP RHD	LH 2641 5443 01 27 N					
11	W/E' Marked Bulbs	RHD 2641 5443 01 27 N					
12	(12V) -1.3%	LHD					
13	ASSY. E' CERT. HEAD LAMP RHD	LH 2641 5443 01 27 N					
14	W/E' Marked Bulbs	RHD 2641 5443 01 27 N					
15	(24V) -1.3%	LHD					

TATA MOTORS PART/DRG. DESCRIPTION.-Assy. Head Lamp (RHD) with Leveling Motor
TATA MOTORS PART/DRG. NUMBER.- 2641 5440 04 38

22.02.11	97P808055	0	...	PARTY'S MODIFIED DRG. WITH TN SELECTION	SRH	DBJ	SRP
22.08.08	91P824469	0	...	PARTY'S MODIFIED DRG. RELEASED FOR MOD 04	PPS	MSK	QNS
DATE	MOD NO.	SL NO.	ZONE	MODIFICATION	DRN.	CHK.	APPD.

23	SPRING HOLDING BRACKET	4HL-509-005	1	CRCA	Zn, Plated White Pass.	yes
22	PH. NO. SCREW ASSY. (M6x25)	4HL-978-009	4		Zn, Plated Green Pass.	yes
21	METAL WASHER (CLIPPING)	4HL-104-021	2		Zn, Plated Green Pass.	yes
20	BULB 12V/60-55W (P43T)	STD-AIS-034	1	M/S DELTA/HALONIX 'E' MARK		yes
19	PARKING BULB 12V/5W WSW	STD-AIS-034	1	M/S PHILLIPS (GARM) 'E' MARK		yes
18	PVOT BUSH	4HL-972-014	1	NYLON6	WHITE	yes
17	BULB HOLDING SPRING	4HL-640-006	1	SPR. STEEL	Zn, Plated White Pass.	yes
16	PARKING HOLDER ASSY	4HL-640-005	1		AS PER DRG	yes
15	LEVELING MOTOR		1		HELLA (GEN 2) / GARASHI (GEN 2) / MINDA (GEN 3)	yes
14	SNAP RING	4HL-976-014	2	SP. STEEL	NATURAL	yes
13	REFLECTOR BUSH	4HL-404-009	2	NYLON6	WHITE	yes
12	BULB CAP	4HL-416-012	1	PP	BLACK	yes
11	PH. NO. SCREW ASSY. (M6x25)	4HL-509-015	2	EN-2C	Zn, Plated White Pass.	yes
10	AIR VENT PIPE	4HL-509-014	1	EPDM	BLACK	yes
9	CUP TYPE GROMMET	4HL-104-009	4	N.L.	BLACK	yes
8	WASHER	4HL-976-005	2	NASS	BLACK	yes
7	NYLON WASHER	4HL-104-007	2	NYLON6	WHITE	yes
6	GASKET	3HL-104-007	1	N.L.	BLACK	yes
5	RUBBER CAP	3HL-640-004	1	EPDM MTC	BLACK	yes
4	SLOTTED ROUND HEAD SCREW M6x75	4HL-976-004	2	N.L.	Zn, Plated Green Pass.	yes
3	INNER RH VENT BRACKET	2HL-640-009	1	C.S.C.A	POSS. COAT. WITH PRIMER	yes
2	REFLECTOR RH SIDE	2HL-640-009	1	BMC	LAQUER V. & W.	yes
1	LENS RH SIDE	2HL-640-001R	1	GLASS	CLEAR	yes
6. No.	DESCRIPTION	DRG. No.	QTY. MATL.	FINISH		REFERENCE
				</		

DO NOT REASURE THE DRAWING	ALL DIMENSIONS ARE IN MM.	DRN.	BY	23.08.08
NEOLITE ZKW LIGHTINGS PVT. LTD.	CHD.	BY	RS	
8-24, MAYAPUR INDUSTRIAL AREA,	APPD.	TSU		
PHASE - 1	SCALE	NTS.		
NEW DELHI - 64	MODEL	TATA 407/709 BMC		
UNSPECIFIED TOL.	ITEM CODE NO.	REV. NO.	DRG. NO.	0HL-640-111
±1.0	GO	PART NO.	NEO-640	
TITLE:	H/L ASSY. PRISMATIC WITH LEVELING MOTOR RHD (RH)			

