

# Navigation System

## ENTERTAINMENT & MONITORING

6) Touch the {ON} key of {Speaker Check} to check speaker output.

### NOTE:

- The speaker front left → front right → rear right → rear left will sound in order for 2 seconds each.
- The speaker sounds at the maximum volume during speaker check.
- Press the {BACK} key to return to the {Line Diag} screen.

## C: INSPECTION

### 1. BASIC INSPECTION

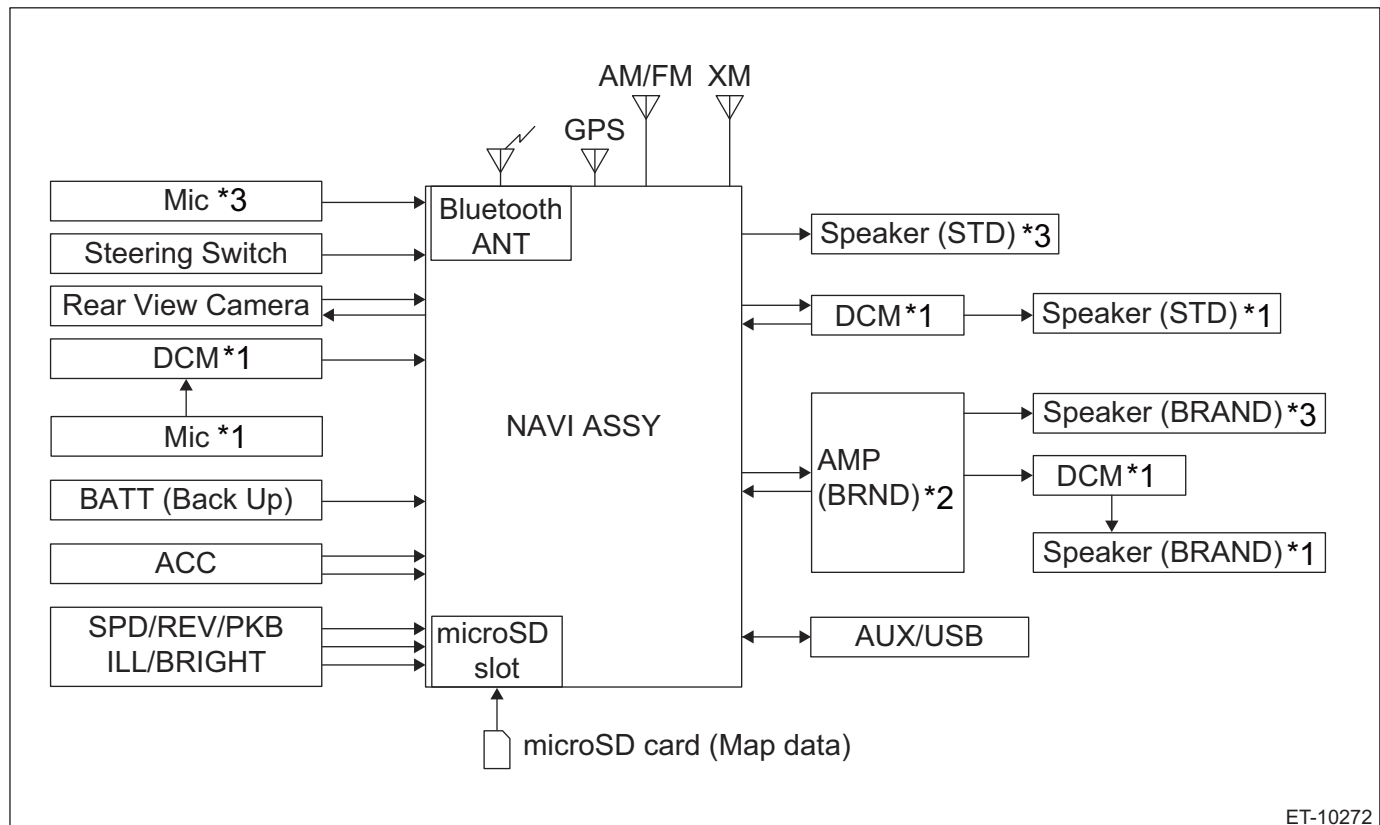
1) Using the Check List for Interview, ask the customer the condition of how the trouble occurred. <Ref. to ETM-9, MODEL WITH 7 INCH DISPLAY (NAVIGATION), CHECK, Check List for Interview.>

2) Check the battery.

- Except for STI model: <Ref. to SC(w/o STI)-51, INSPECTION, Battery.>
- STI model: <Ref. to SC(STI)-25, INSPECTION, Battery.>

3) Check the list of Diagnostics with Phenomenon, and perform diagnosis according to the procedures. <Ref. to ETM-65, NAVIGATION SYSTEM, LIST, Diagnostics with Phenomenon.>

### 2. SYSTEM BLOCK DIAGRAM



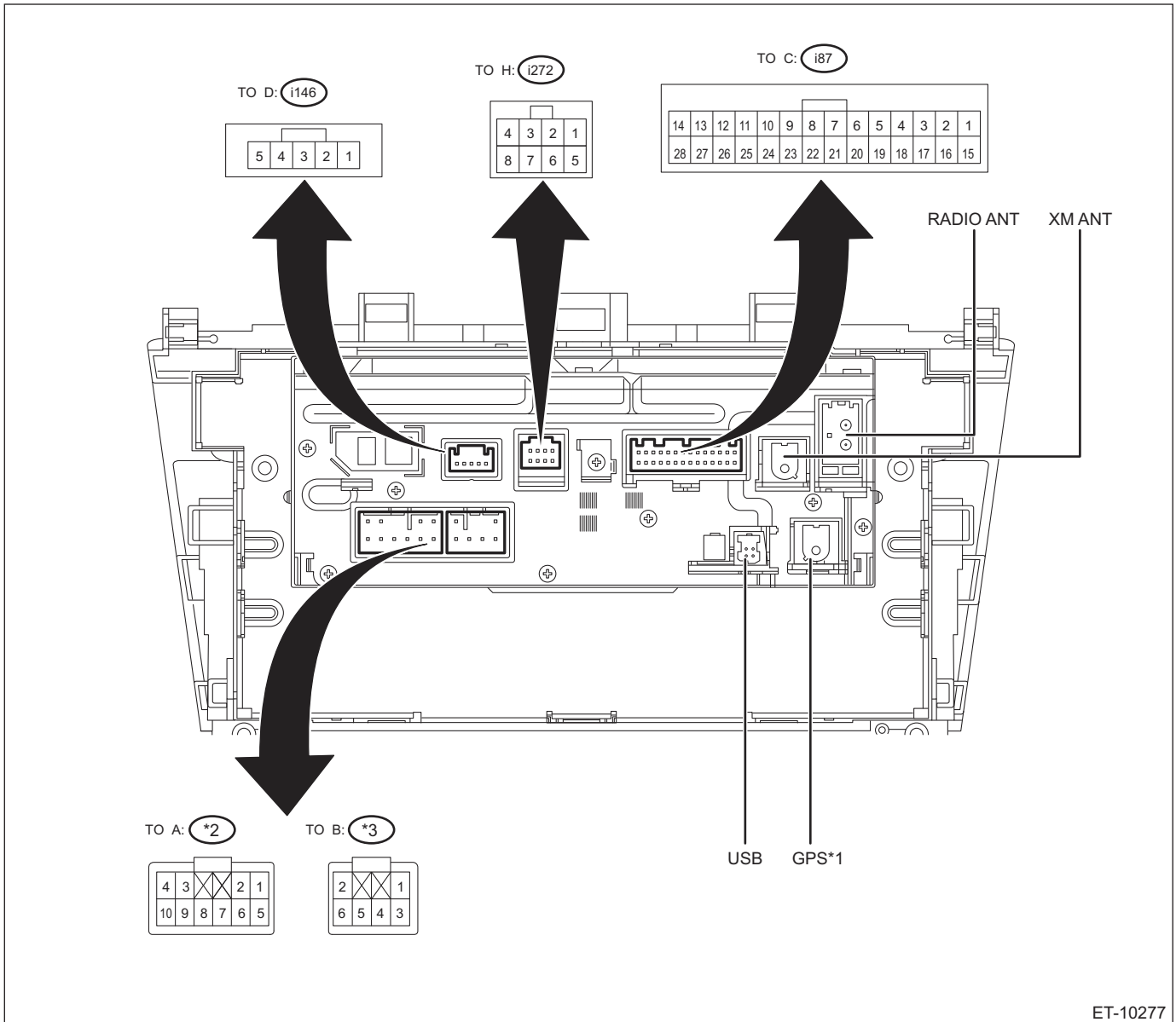
\*1: Model with telematics

\*2: Model with power amplifier

\*3: Model without telematics

### 3. MODULE I/O SIGNAL

#### Unit body



\*1: Only model with navigation system

\*2: Model without power amplifier: i85  
Model with power amplifier: i35

\*3: Model without power amplifier: i131  
Model with power amplifier: i36

# Navigation System

## ENTERTAINMENT & MONITORING

- Power supply and speaker output terminal
  - Model without power amplifier

Terminal No.	Contents	Measuring condition	Measurement value	Note
(i85) No. 1	FRONT-RH (+)	—	—	—
(i85) No. 2	FRONT-LH (+)	—	—	—
(i85) No. 3 ↔ Chassis ground	ACC	ACC ON	11 — 15 V	—
(i85) No. 4 ↔ Chassis ground	+B	Always	11 — 15 V	—
(i85) No. 5	FRONT-RH (–)	—	—	—
(i85) No. 6	FRONT-LH (–)	—	—	—
(i85) No. 7 ↔ Chassis ground	GND	Always	0 V	—
(i85) No. 8	ANTENNA-ON	—	—	—
(i85) No. 9	N.C.	—	—	—
(i85) No. 10	ILLUMI (+)	—	—	—
(i131) No. 1	REAR-RH (+)	—	—	—
(i131) No. 2	REAR-LH (+)	—	—	—
(i131) No. 3	REAR-RH (–)	—	—	—
(i131) No. 4	N.C.	—	—	—
(i131) No. 5	ILLUMI (–)	—	—	—
(i131) No. 6	REAR-LH (–)	—	—	—

- Model with power amplifier

Terminal No.	Contents	Measuring condition	Measurement value	Note
(i35) No. 1	FRONT-RH (+)	—	—	—
(i35) No. 2	FRONT-LH (+)	—	—	—
(i35) No. 3 ↔ Chassis ground	ACC	ACC ON	11 — 15 V	—
(i35) No. 4 ↔ Chassis ground	+B	Always	11 — 15 V	—
(i35) No. 5	FRONT-RH (–)	—	—	—
(i35) No. 6	FRONT-LH (–)	—	—	—
(i35) No. 7 ↔ Chassis ground	GND	Always	0 V	—
(i35) No. 8	ANTENNA-ON	—	—	—
(i35) No. 9	N.C.	—	—	—
(i35) No. 10	ILLUMI (+)	—	—	—
(i36) No. 1	REAR-RH (+) / N.C.	—	—	—
(i36) No. 2	REAR-LH (+) / INT+	—	—	—
(i36) No. 3	REAR-RH (–) / N.C.	—	—	—
(i36) No. 4	N.C. / SLD2	—	—	—
(i36) No. 5	ILLUMI (–)	—	—	—
(i36) No. 6	REAR-LH (–) / INT (–)	—	—	—

- Steering switch and AUX input terminal for microphone etc.

Terminal No.	Contents	Measuring condition	Measurement value	Note
(i87) No. 1 ↔ Chassis ground	N.C.	—	—	—
(i87) No. 2	REV	—	—	—
(i87) No. 3	BRIGHT	—	—	—
(i87) No. 4	MACC	—	—	—
(i87) No. 5	MIC+	—	—	—
(i87) No. 6	MIC-DET	—	—	—
(i87) No. 7	N.C./TX1+ (for AMP communication)*1	—	—	—
(i87) No. 8	N.C. /TX1- (for AMP communication)*1	—	—	—
(i87) No. 9	N.C.	—	—	—
(i87) No. 10	N.C.	—	—	—
(i87) No. 11	N.C.	—	—	—
(i87) No. 12	N.C.	—	—	—
(i87) No. 13	N.C.	—	—	—
(i87) No. 14	N.C.	—	—	—
(i87) No. 15 ↔ Chassis ground	PKB	At parking ON	1 V or less	—
(i87) No. 16	N.C./MUTE*1	—	—	—
(i87) No. 17 ↔ Chassis ground	SPD	When the tire is rotating	Pulse signal	—
(i87) No. 18	N.C.	—	—	—
(i87) No. 19	MIC-	—	—	—
(i87) No. 20	N.C.	—	—	—
(i87) No. 21	SW1	—	—	—
(i87) No. 22	SW2	—	—	—
(i87) No. 23	SWG	—	—	—
(i87) No. 24	N.C.	—	—	—
(i87) No. 25	AUX-DET	—	—	—
(i87) No. 26	AUX-R (+)	—	—	—
(i87) No. 27	AUX-LR (-)	—	—	—
(i87) No. 28	AUX-L (+)	—	—	—

\*1: Model with power amplifier

- Rearview camera

Terminal No.	Contents	Measuring condition	Measurement value	Note
(i146) No. 1 ↔ Chassis ground	CGND	Always	0 V	—
(i146) No. 2	CB+	—	—	—
(i146) No. 3	CV+	—	—	—
(i146) No. 4	CV-	—	—	—
(i146) No. 5	N.C.	—	—	—

# Navigation System

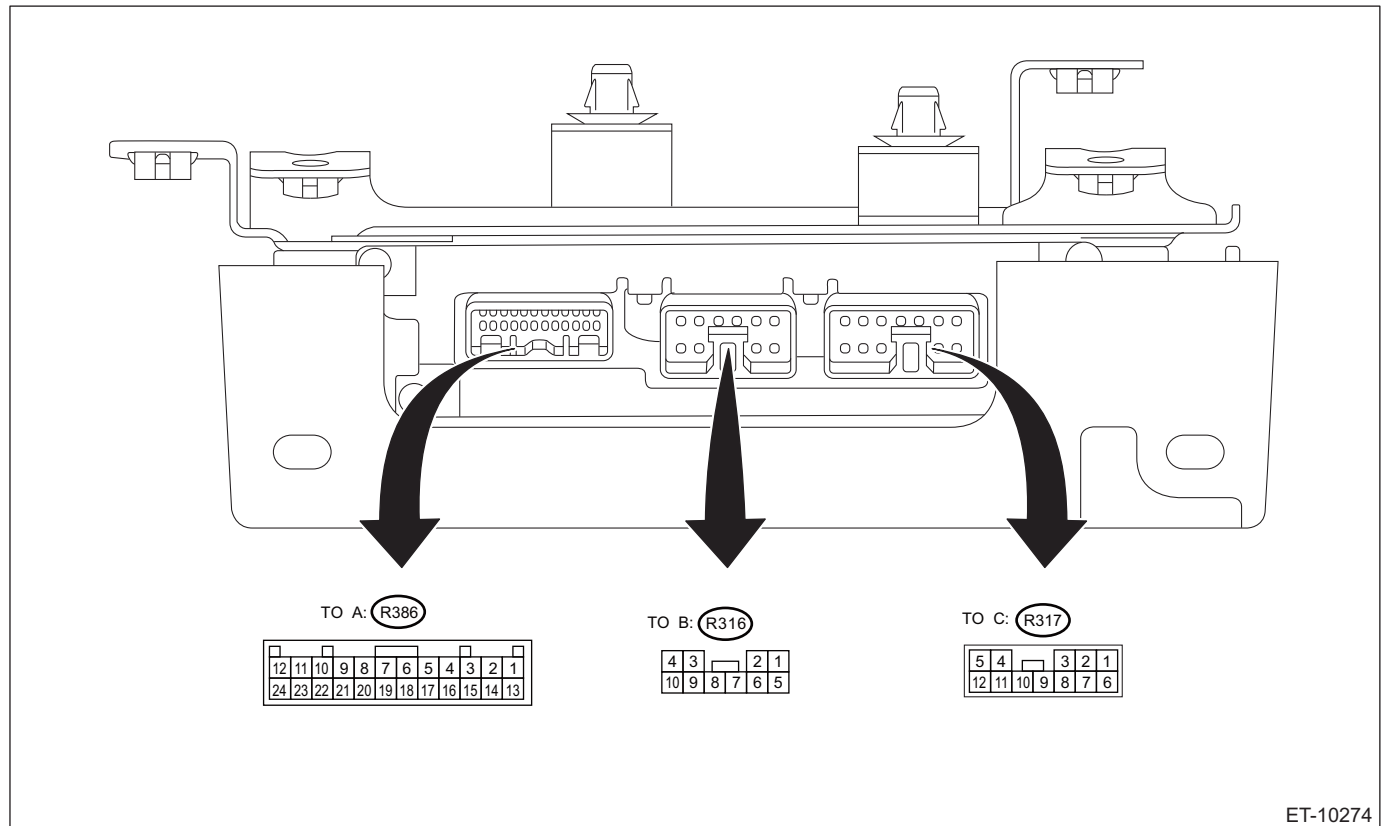
## ENTERTAINMENT & MONITORING

### • RSE

Terminal No.	Contents	Measuring condition	Measurement value	Note
(i272) No. 1	N.C.	—	—	—
(i272) No. 2	N.C.	—	—	—
(i272) No. 3	N.C.	—	—	—
(i272) No. 4	N.C.	—	—	—
(i272) No. 5	N.C.	—	—	—
(i272) No. 6	N.C.	—	—	—
(i272) No. 7	N.C.	—	—	—
(i272) No. 8	N.C./MUTE*1	—	—	—

\*1: Model with telematics

### Power amplifier



Terminal No.	Contents	Details
(R386) No. 1	NOT USED	Not used
(R386) No. 2	L- IN	Left channel negative input
(R386) No. 3	L+ IN	Left channel positive input
(R386) No. 4	R- IN	Right channel negative input
(R386) No. 5	R+ IN	Right channel positive input
(R386) No. 6	S-GND	Shield ground
(R386) No. 7	NOT USED	Not used
(R386) No. 8	NOT USED	Not used
(R386) No. 9	NOT USED	Not used
(R386) No. 10	EQ SEL	Equalizer select
(R386) No. 11	SPEED	Vehicle speed pulse
(R386) No. 12	ACC	ACC power supply
(R386) No. 13	NOT USED	Not used

Terminal No.	Contents	Details
(R386) No. 14	NOT USED	Not used
(R386) No. 15	NOT USED	Not used
(R386) No. 16	NOT USED	Not used
(R386) No. 17	NOT USED	Not used
(R386) No. 18	NOT USED	Not used
(R386) No. 19	NOT USED	Not used
(R386) No. 20	NOT USED	Not used
(R386) No. 21	NOT USED	Not used
(R386) No. 22	II1–	Interrupt information negative
(R386) No. 23	II1+	Interrupt information positive
(R386) No. 24	NOT USED	Not used
(R316) No. 1	+B	Battery power supply
(R316) No. 2	REAR (25+100 mm (0.79+3.15 in)) L+	Left side rear door speaker (25+100 mm (0.79+3.15 in)) positive
(R316) No. 3	FRONT (160 mm (6.30 in)) R+	Right side front door speaker (160 mm (6.30 in)) positive
(R316) No. 4	FRONT (160 mm (6.30 in)) L–	Left side front door speaker (160 mm (6.30 in)) negative
(R316) No. 5	+B	Battery power supply
(R316) No. 6	REAR (25+100 mm (0.79+3.15 in)) L–	Left side rear door speaker (25+100 mm (0.79+3.15 in)) negative
(R316) No. 7	REAR (25+100 mm (0.79+3.15 in)) R–	Right side rear door speaker (25+100 mm (0.79+3.15 in)) negative
(R316) No. 8	REAR (25+100 mm (0.79+3.15 in)) R+	Right side rear door speaker (25+100 mm (0.79+3.15 in)) positive
(R316) No. 9	FRONT (160 mm (6.30 in)) R–	Right side front door speaker (160 mm (6.30 in)) negative
(R316) No. 10	FRONT (160 mm (6.30 in)) L+	Left side front door speaker (160 mm (6.30 in)) positive
(R317) No. 1	IN-PANE (80 mm (3.15 in)) R–	Instrument panel right side speaker (80 mm (3.15 in)) negative
(R317) No. 2	IN-PANE (80 mm (3.15 in)) R+	Instrument panel right side speaker (80 mm (3.15 in)) positive
(R317) No. 3	IN-PANE (80 mm (3.15 in)) L–	Instrument panel left side speaker (80 mm (3.15 in)) negative
(R317) No. 4	SUB WOOFER (200 mm (7.87 in)) 1+	Sub woofer (200 mm (7.87 in)) 1 positive
(R317) No. 5	SUB WOOFER (200 mm (7.87 in)) 2+	Sub woofer (200 mm (7.87 in)) 2 positive
(R317) No. 6	GND	Ground
(R317) No. 7	GND2	Ground
(R317) No. 8	NOT USED	Not used
(R317) No. 9	IN-PANE (80 mm (3.15 in)) L+	Instrument panel left side speaker (80 mm (3.15 in)) positive
(R317) No. 10	SUB WOOFER (200 mm (7.87 in)) 1–	Sub woofer (200 mm (7.87 in)) 1 negative
(R317) No. 11	NOT USED	Not used
(R317) No. 12	SUB WOOFER (200 mm (7.87 in)) 2–	Sub woofer (200 mm (7.87 in)) 2 negative

## D: NOTE

For procedure of each component in the navigation system, refer to the respective section.

- Navigation unit: <Ref. to ETM-50, Navigation Body.>
- GPS antenna: <Ref. to ETM-51, GPS Antenna.>

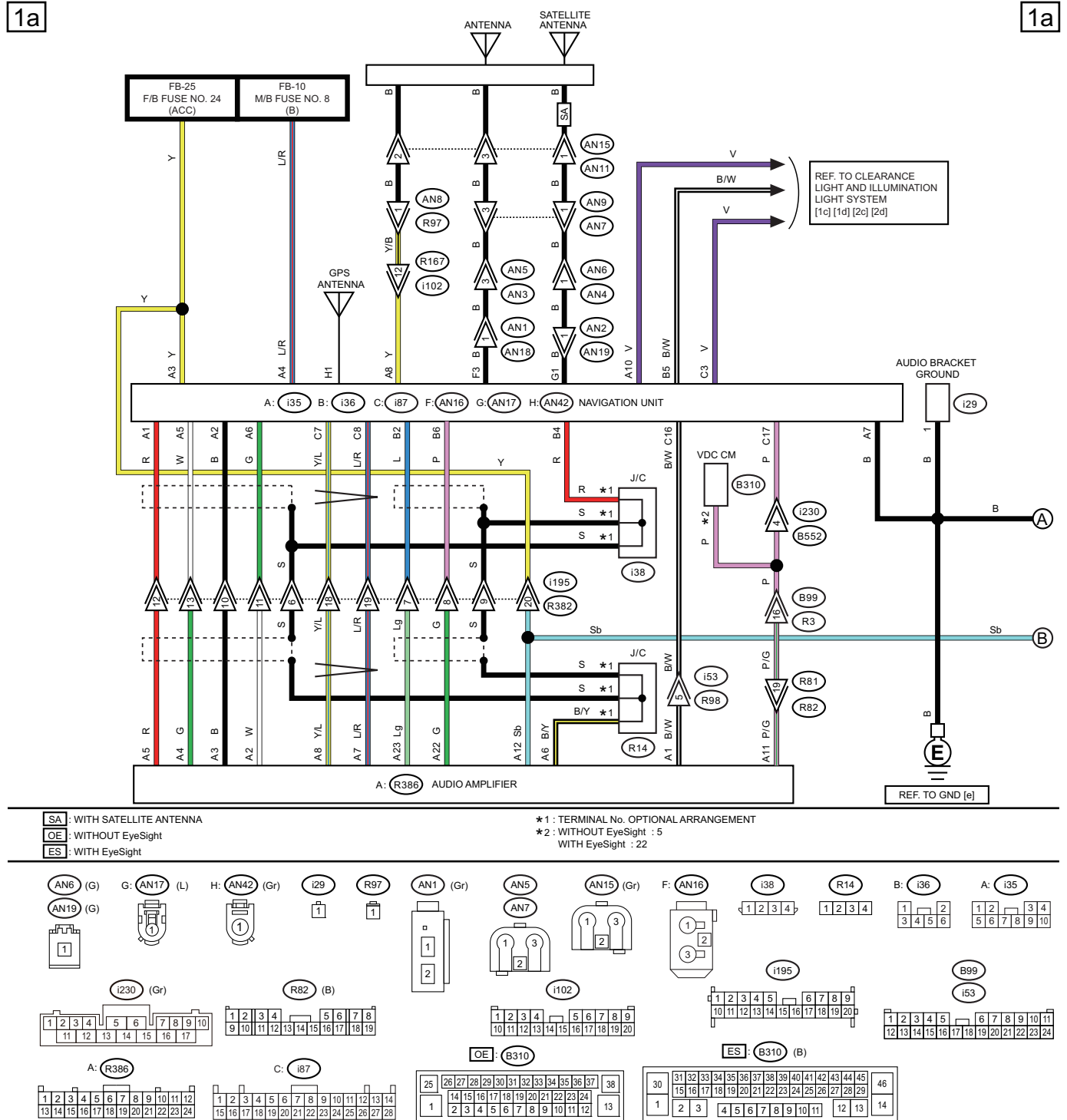
# Navigation System

## WIRING SYSTEM

### 35.Navigation System

#### A: WIRING DIAGRAM

##### 1. WITHOUT TELEMATICS



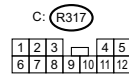
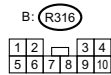
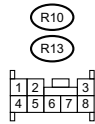
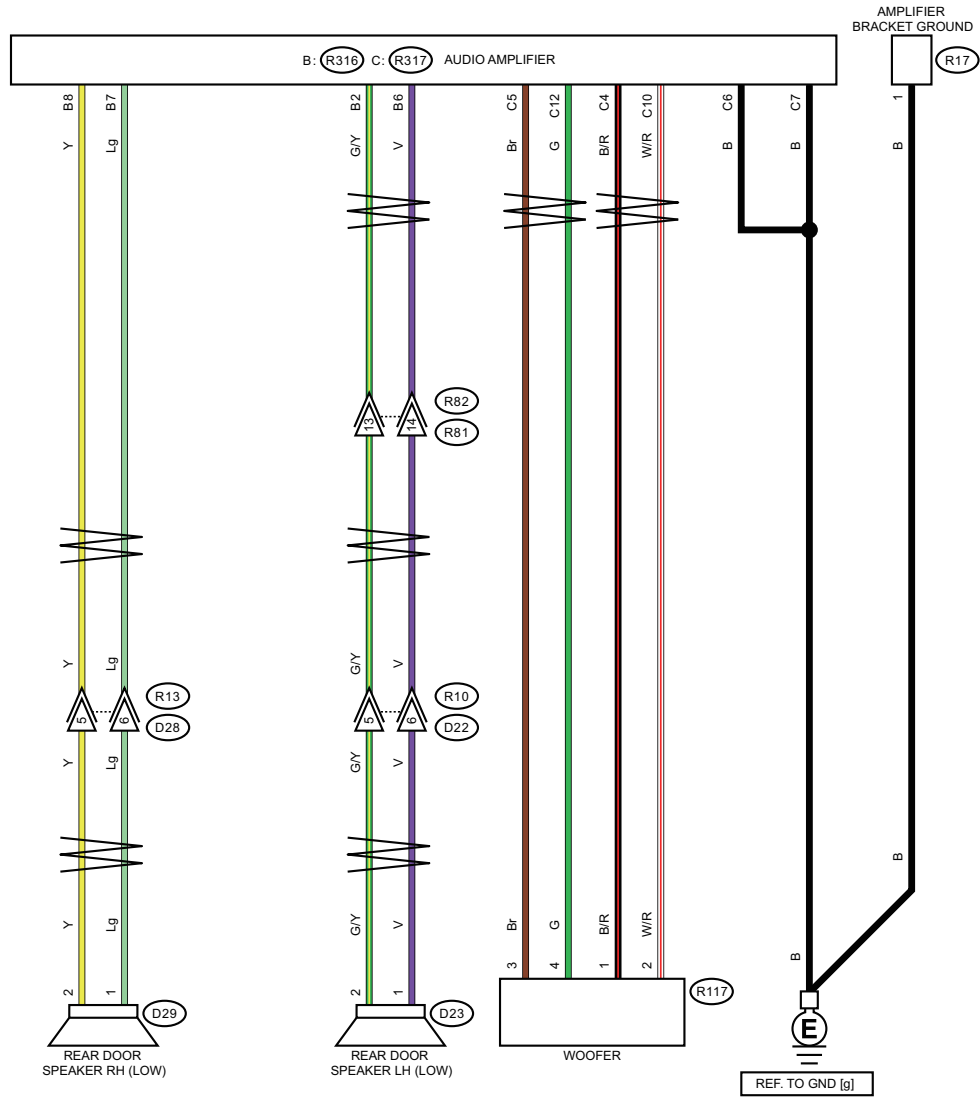
WI-71738

# Navigation System

## WIRING SYSTEM

1b

1b



WI-66767

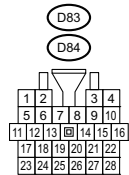
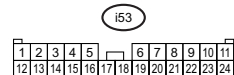
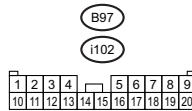
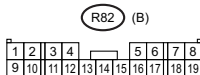
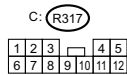
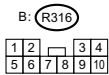
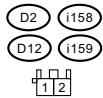
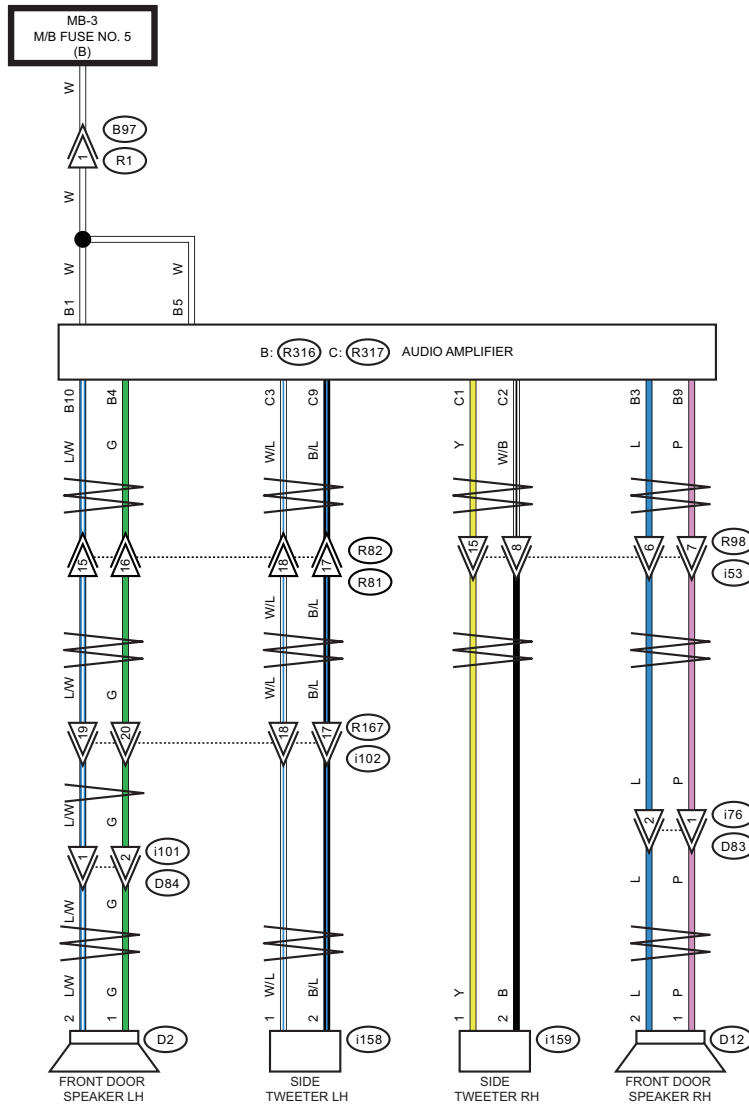


# Navigation System

## WIRING SYSTEM

1c

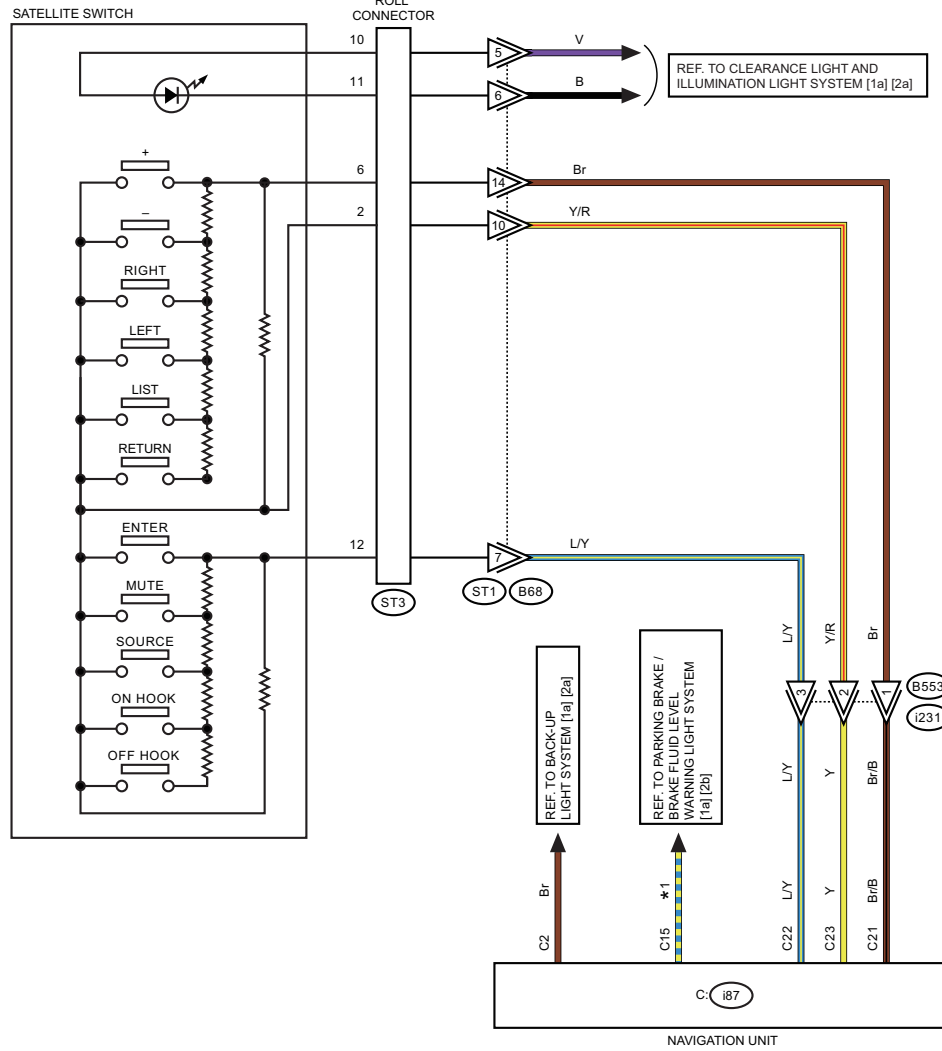
1c



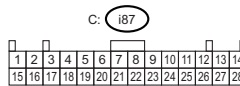
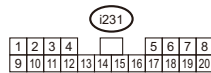
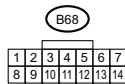
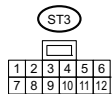
WI-66768

1d

1d



\*1 : WITHOUT EyeSight : Gr  
WITH EyeSight : Y/G



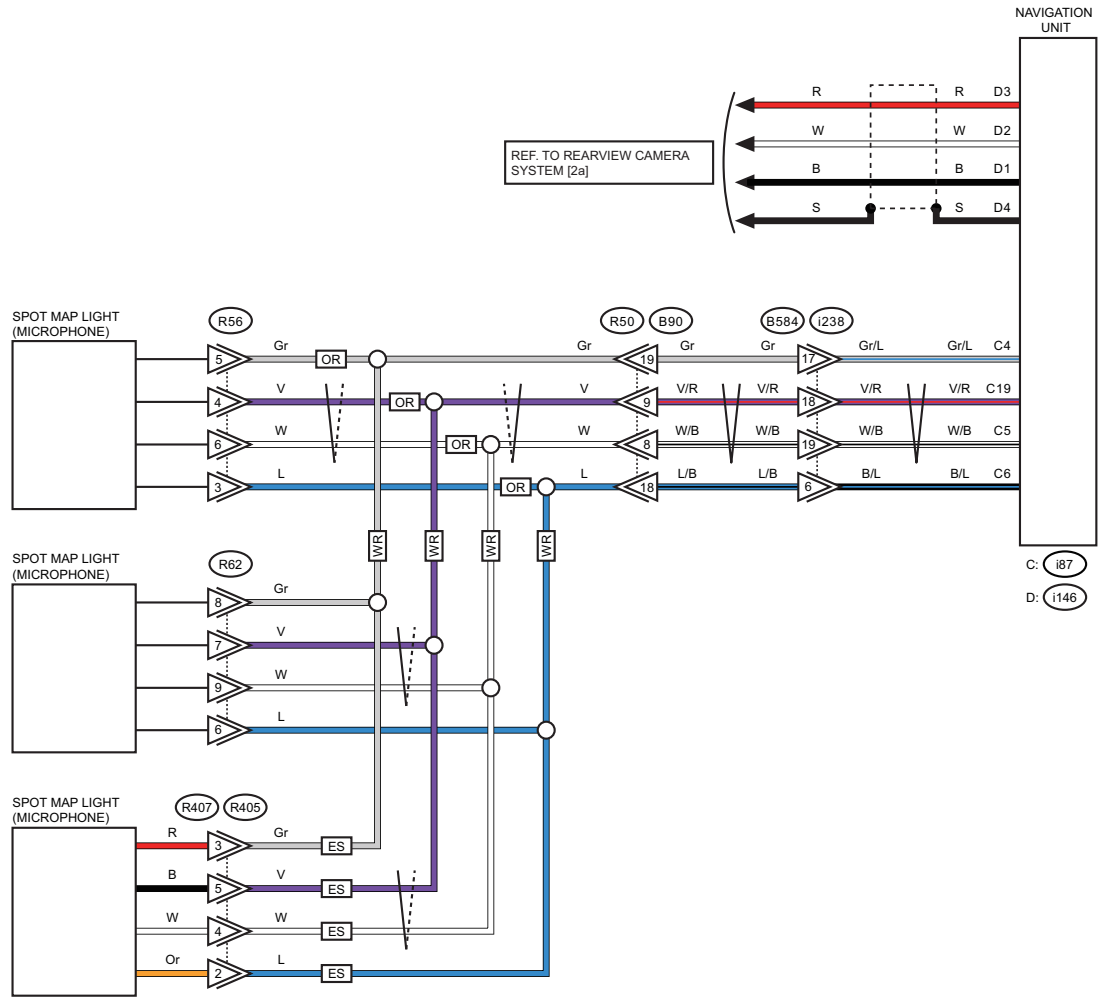
WI-71739

# Navigation System

## WIRING SYSTEM

1e

1e



OR: WITHOUT SUNROOF

WR: WITH SUNROOF

ES: WITH EyeSight

D: I146

1	2	3	4	5
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R56

1	2
3	4
5	6

R62

1	2	3	4
5	6	7	8
9	10		

R405

1	2	3	4	5
6	7	8	9	10
11	12			

I238

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20							

R50

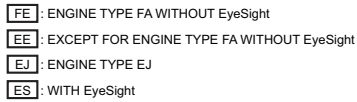
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11	12	13	14	15	16	17	18	19	20

C: I87

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15	16	17	18	19	20	21	22	23	24	25	26	27	28

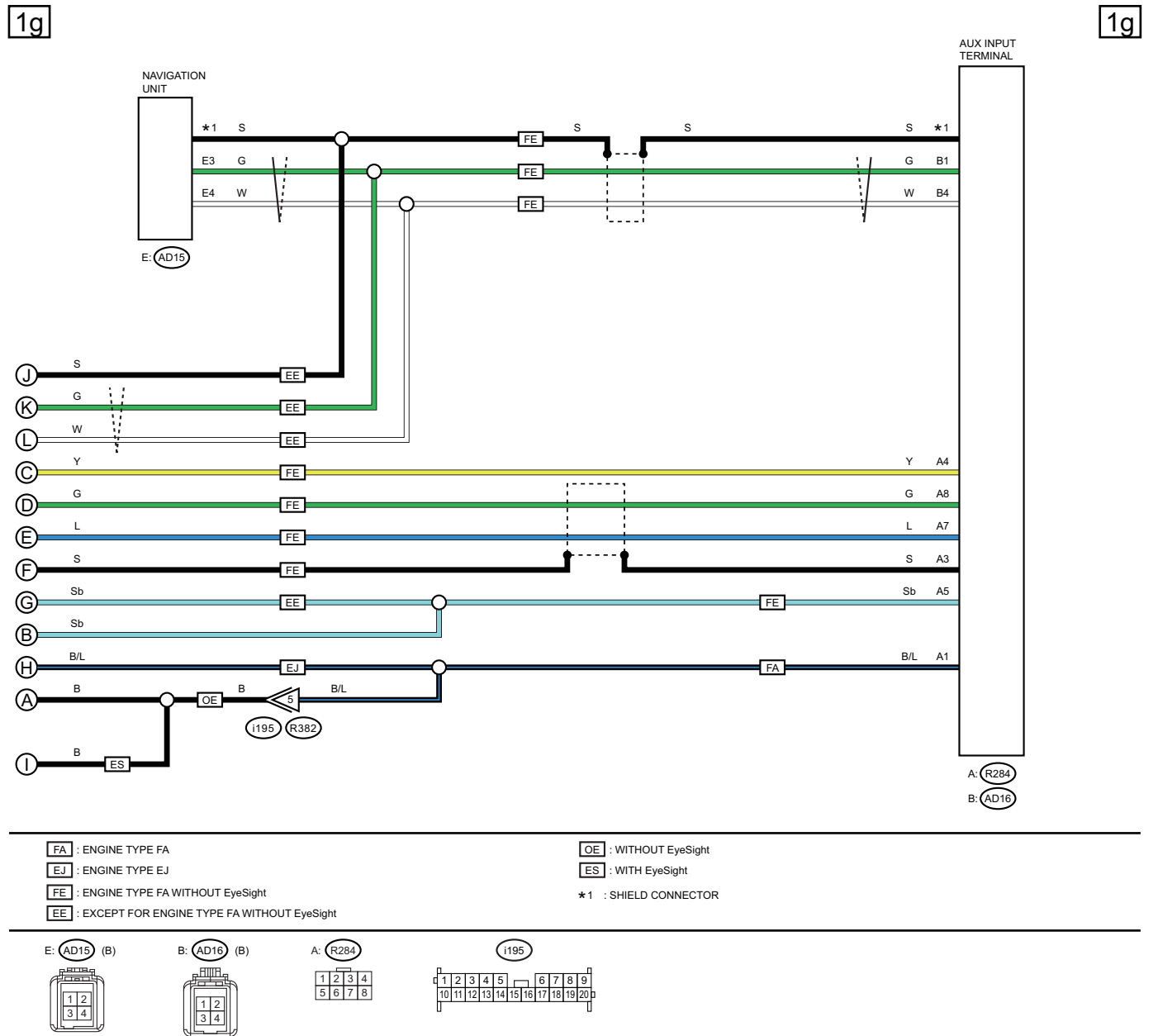
WI-71740

## WIRING SYSTEM



# Navigation System

## WIRING SYSTEM

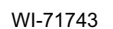


WI-71742

2a



\*2 : WITHOUT EyeSight : 5  
WITH EyeSight : 22

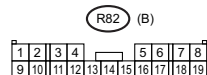
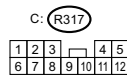
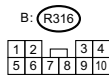
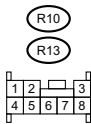
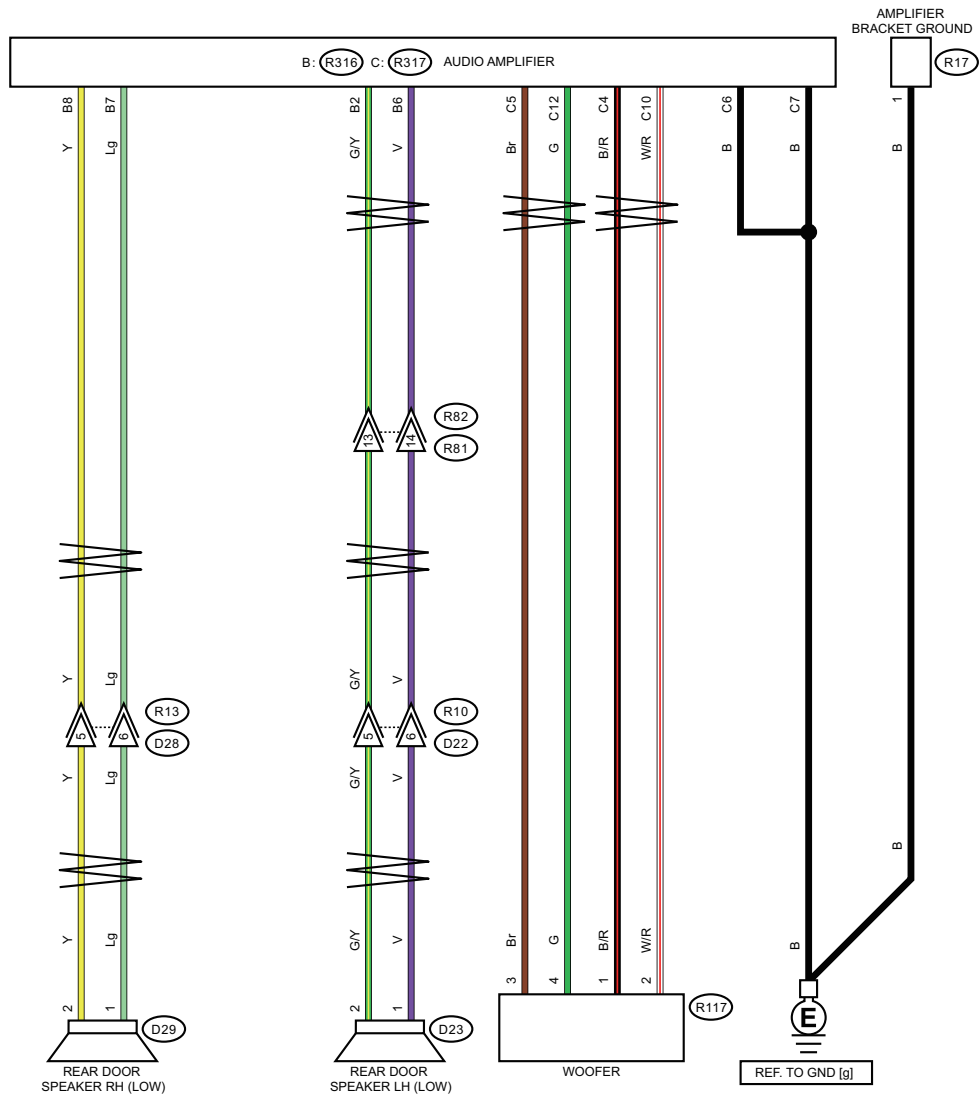


# Navigation System

## WIRING SYSTEM

2b

2b



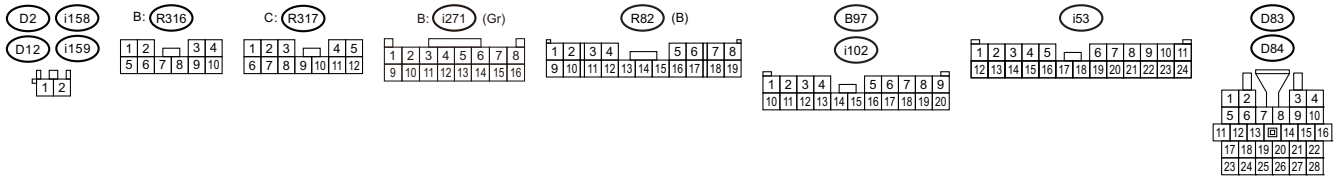
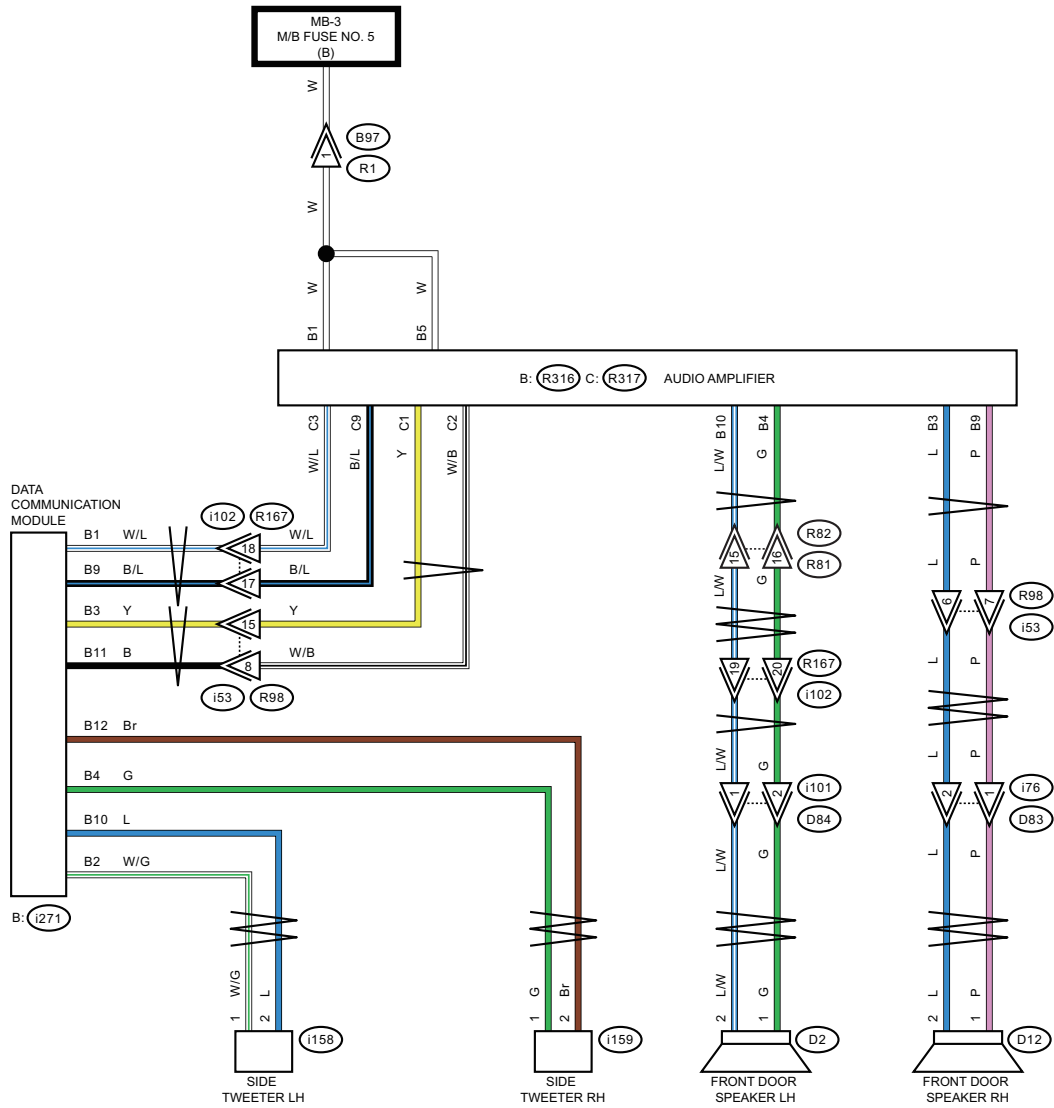
WI-66776

# Navigation System

WIRING SYSTEM

2c

2c



WI-66777

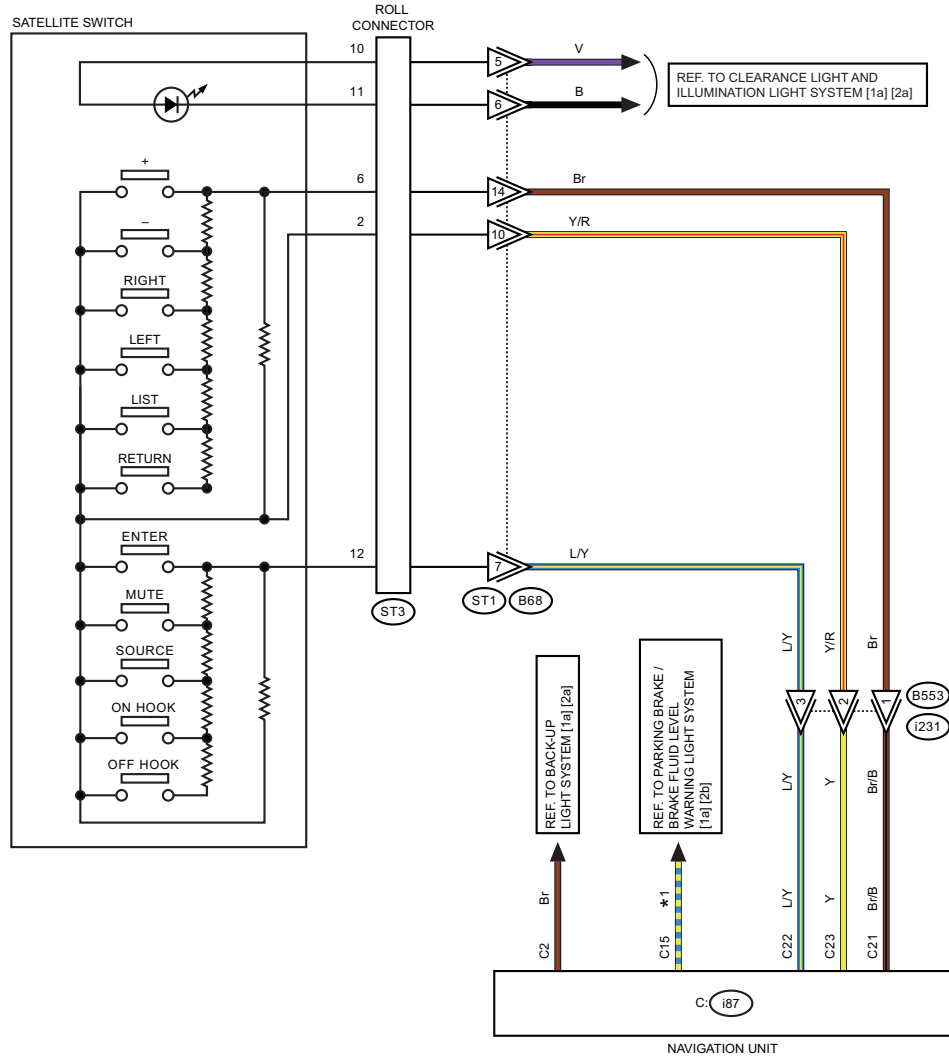


# Navigation System

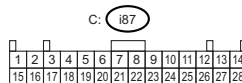
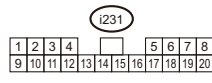
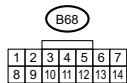
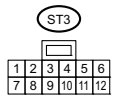
## WIRING SYSTEM

2d

2d



\* 1 : WITHOUT EyeSight : Gr  
WITH EyeSight : Y/G



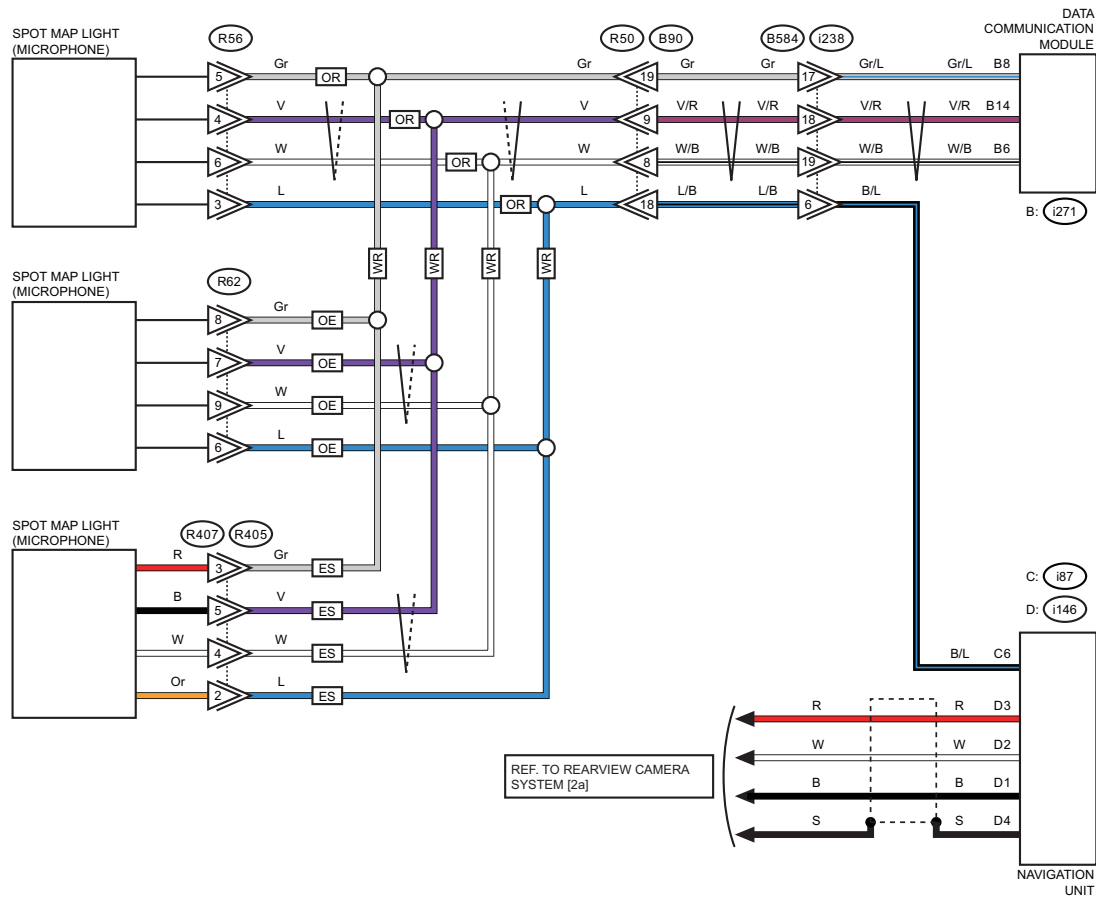
WI-71744

# Navigation System

## WIRING SYSTEM

2e

2e

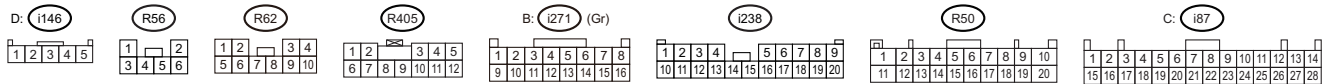


OR : WITHOUT SUNROOF

WR : WITH SUNROOF

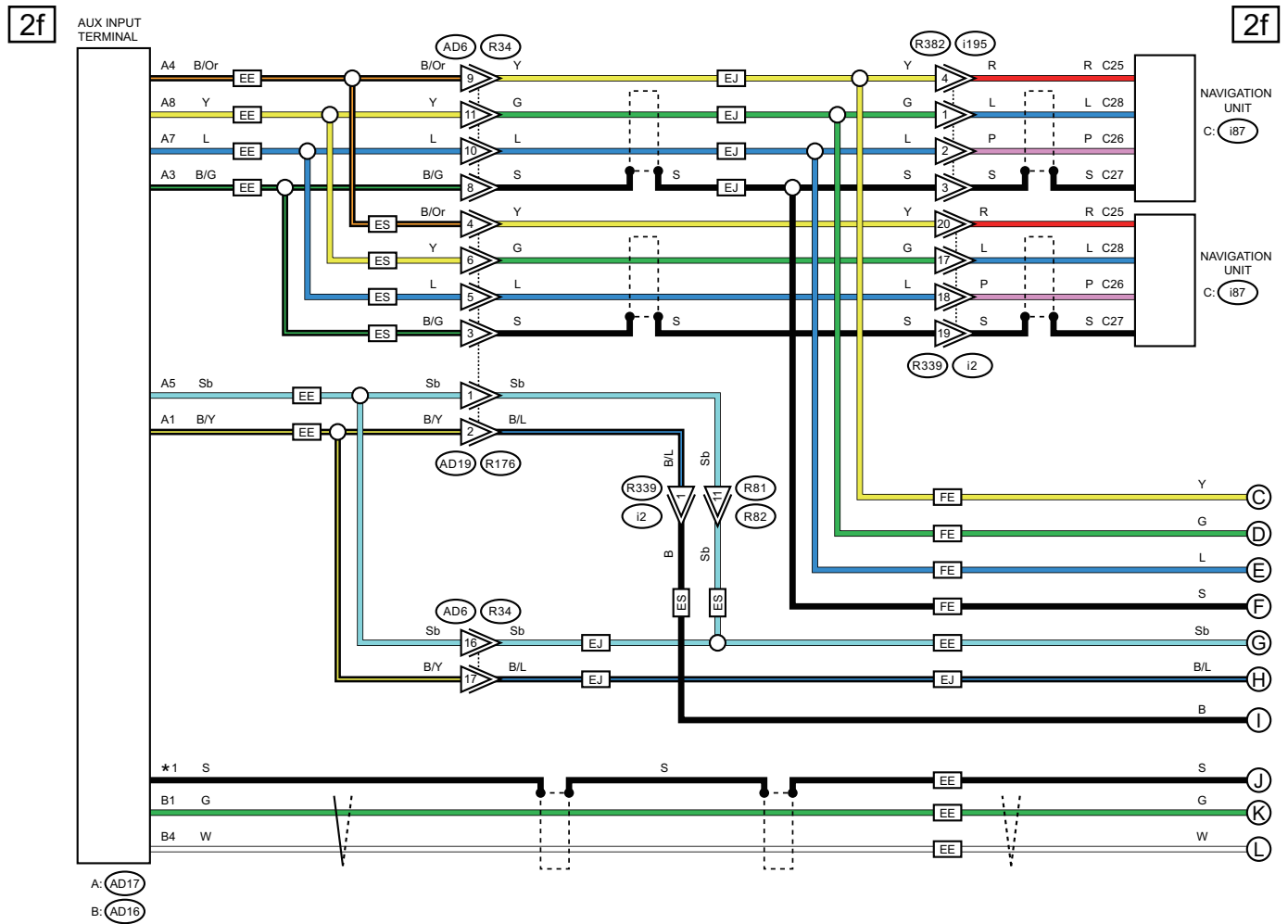
OE : WITHOUT EyeSight

ES : WITH EyeSight



WI-71745

## WIRING SYSTEM



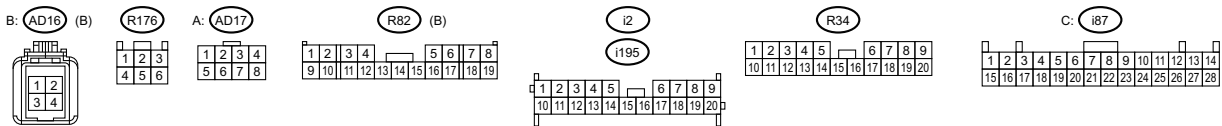
**FE** : ENGINE TYPE FA WITHOUT EyeSight

**EE**: EXCEPT FOR ENGINE TYPE FA WITHOUT EyeSight

**EJ** : ENGINE TYPE EJ

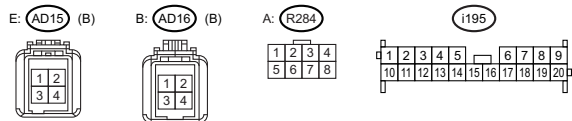
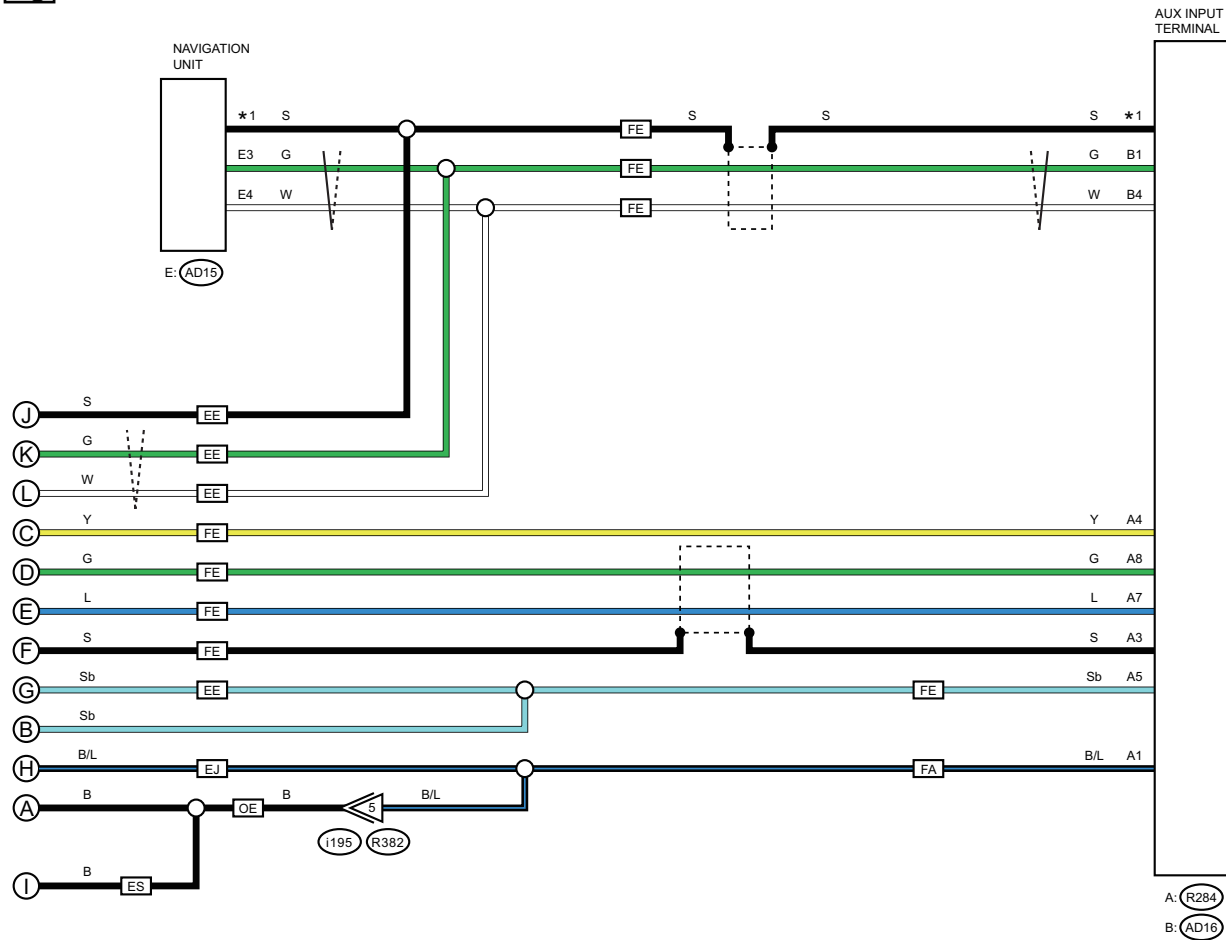
**ES**: WITH EyeSight

\*1 : SHIELD CONNECTOR



2g

2g

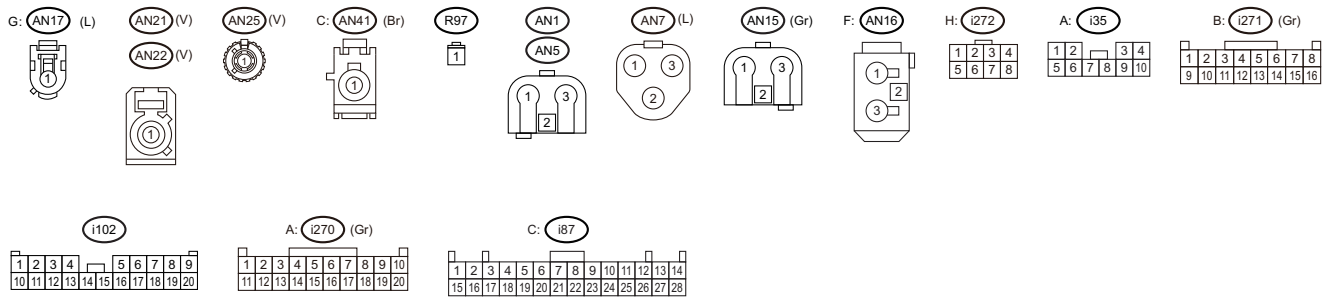
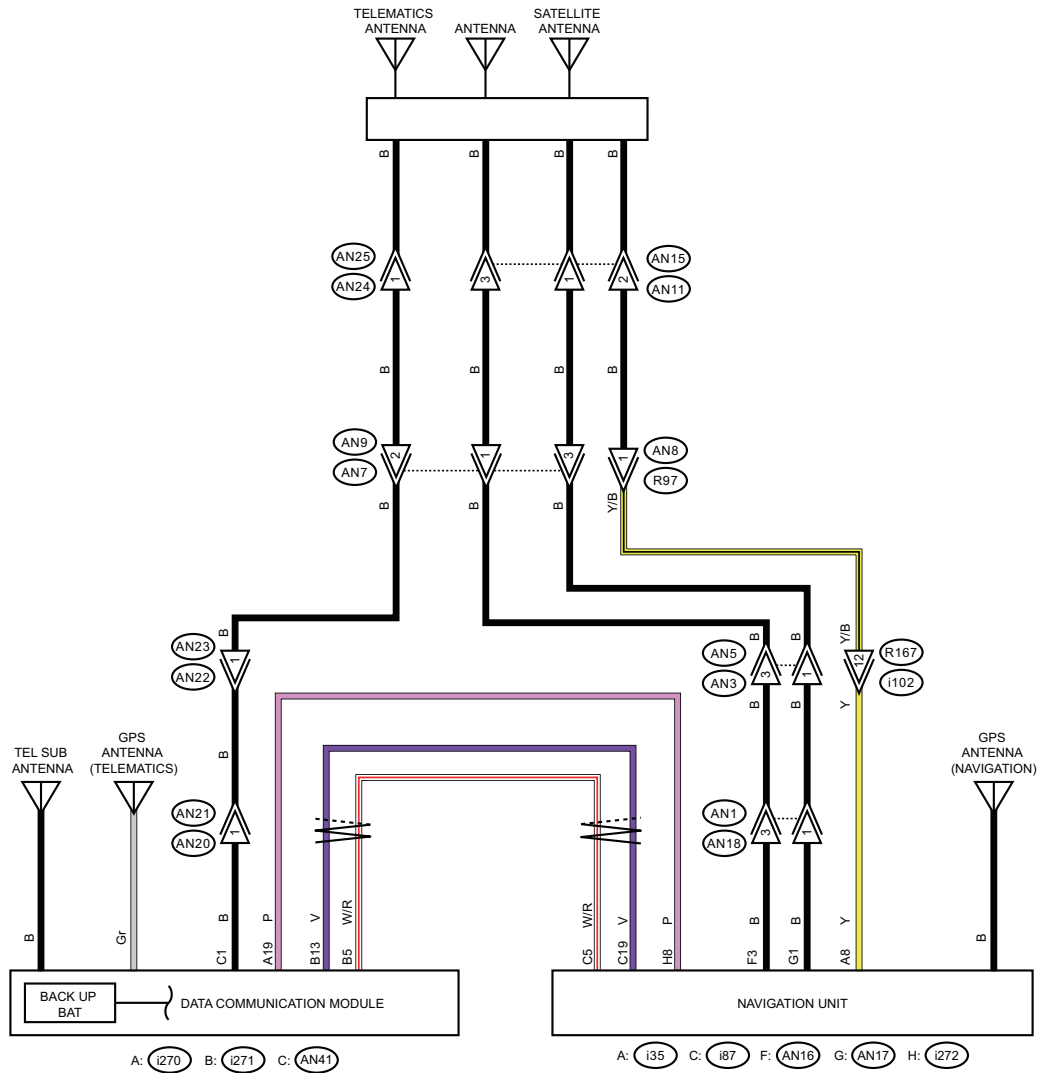


# Navigation System

## WIRING SYSTEM

2h

2h



WI-71748