



WI-026-R1

## Fasteners Assembly Instructions for NG Ford Ranger 2022-2024 Bull Bar

### Applying for products:

1221 NG-FR-2224-PC

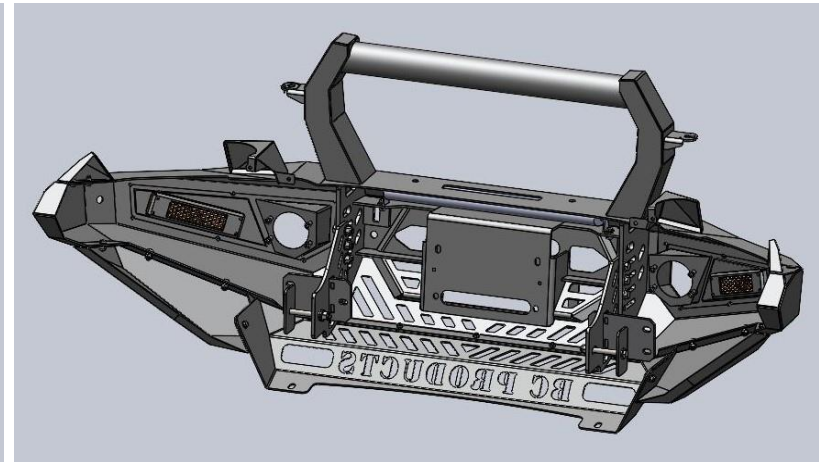
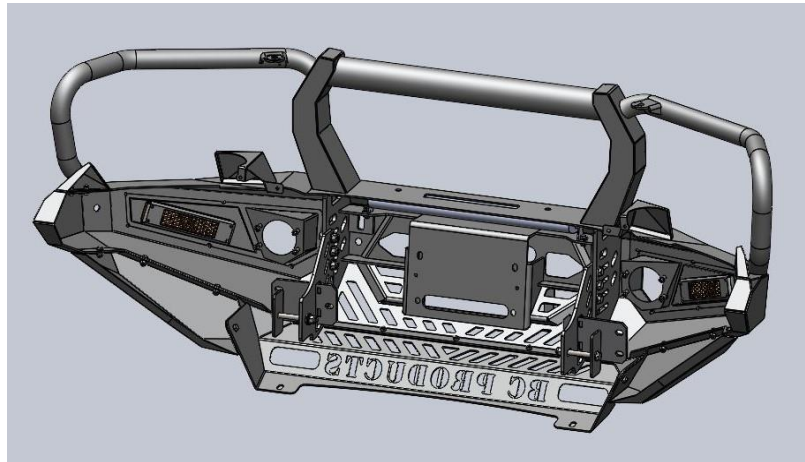
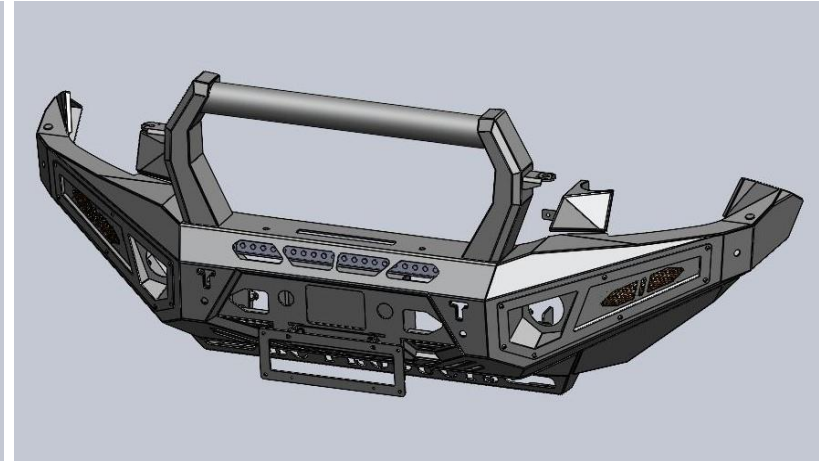
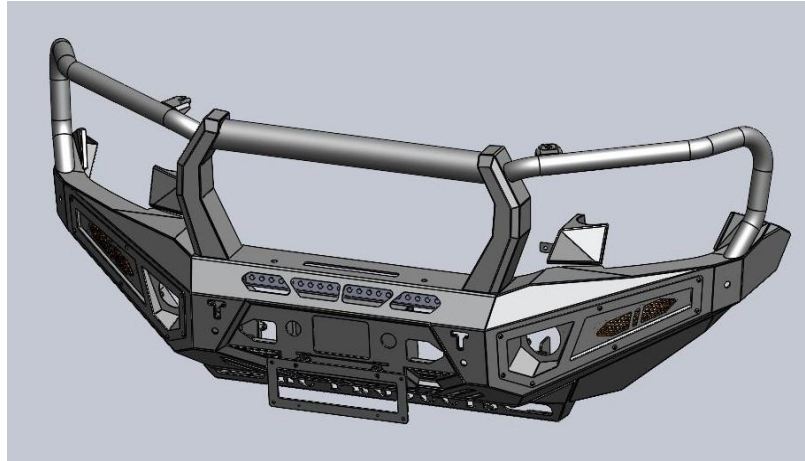
1221 NG-FR-2224-PC-3H

1221 NG-FR-2224-PC-LH

1221 NG-FR-2224-PC-SH

Part number	Description	Qty/per set
AC01	Hex Head Bolt M12 x 40mmL x P1.25	6
AC02	Nyloc Nut M12 x P1.25	8
AC03	Steel Nord Lock Washer M12 x 13mmID x 19mmOD x 2.2mmT	6
AC04	Steel Flat Washer M12 x 13mmID x 26mmOD x 2.2mmT	22
AC07	Steel Flat Washer M8 x 8.4mmID x 17mmOD x 2.5mmT	35
AC08	Steel Spring Washer M8	7
AC09	M6 x 12mmL x P1 Steel Hex socket (allen Key) & Domed Head Bolt	22
AC10	Hex Head Bolt M8 x 25mmL x P1.25	4
AC11	Steel Spring Washer M6	12
AC12	M4 x 16mmL x P0.7 Hex socket (allen Key) & Domed Head Bolt	12
AC13	Hex Head Bolt M8 x 20mmL x P1.25	17
AC14	Steel Bolt M12 x 110 x P1.25 - 30mm Thread	2
AC15	Steel Spring Washer M4	8
AC16	Hex Head Bolt M6 x 16mmL x P1.0	4
AC17	Steel Flat Washer M4 x 4.3mmID x 9mmOD x 0.8mmT	4
AC18	Nyloc Nut M4 x P0.7	4
AC19	Steel Flat Washer M6 x 6.6mmID x 15mmOD x 2mmT	12
AC20	Nyloc Nut M8 x P1.25	14

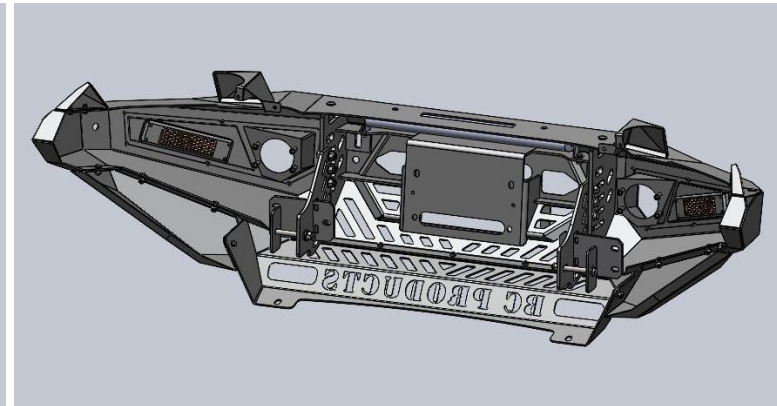
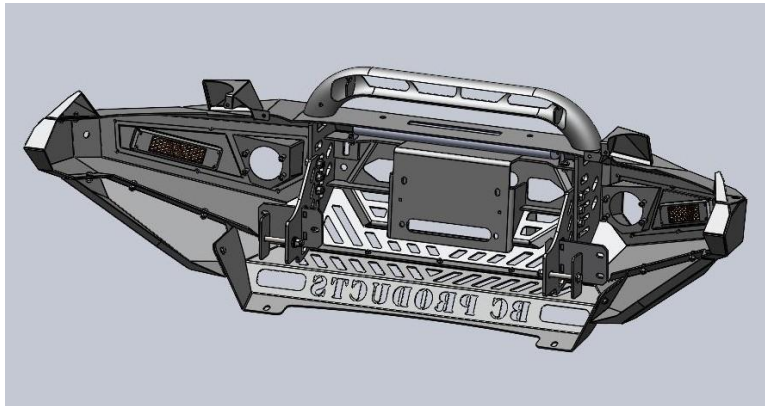
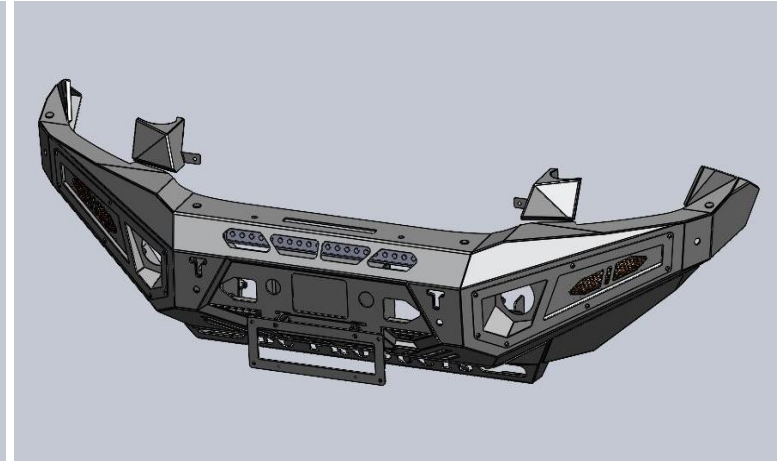
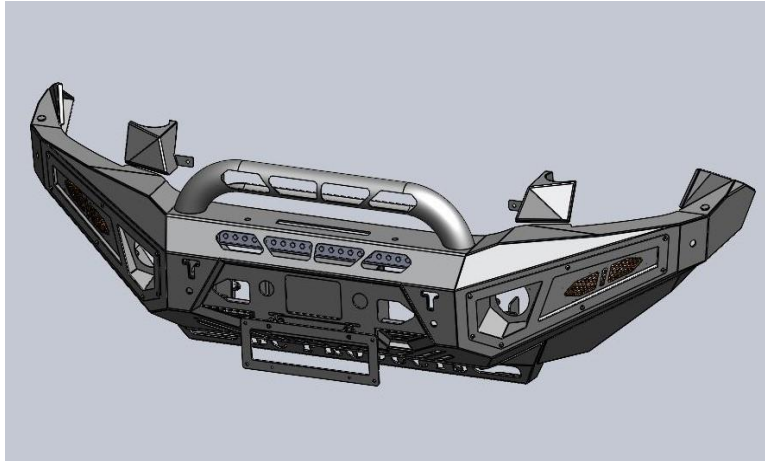
GENERAL VIEW



TRIPLE HOOP

SINGLE HOOP

GENERAL VIEW

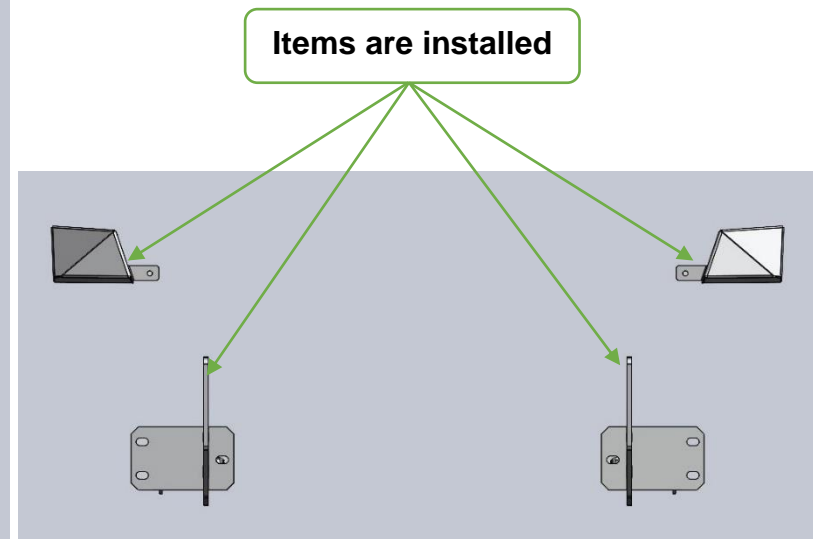
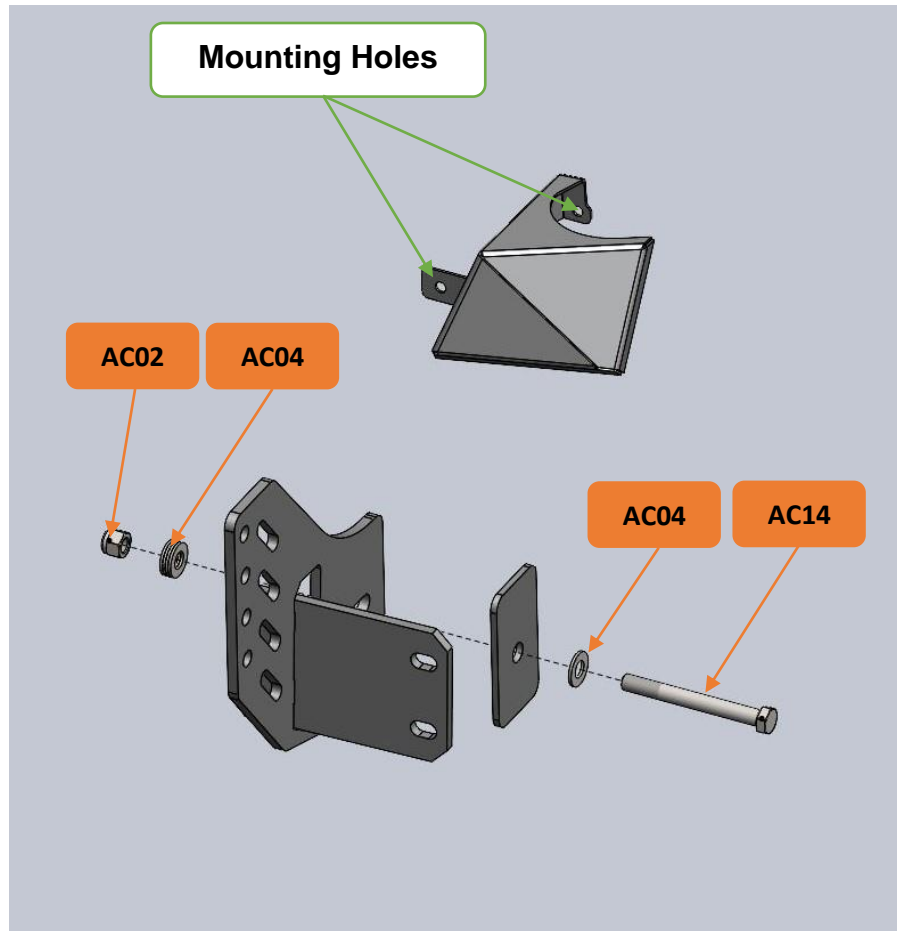


**LOW HOOP**

**NO HOOP**

WI-026-R1

**STEP 1:** Install Mounting Brackets & Patch, bolted both sides with 6 positions.



**AC02 x 02 pcs** : Nyloc Nut M12 x P1.25

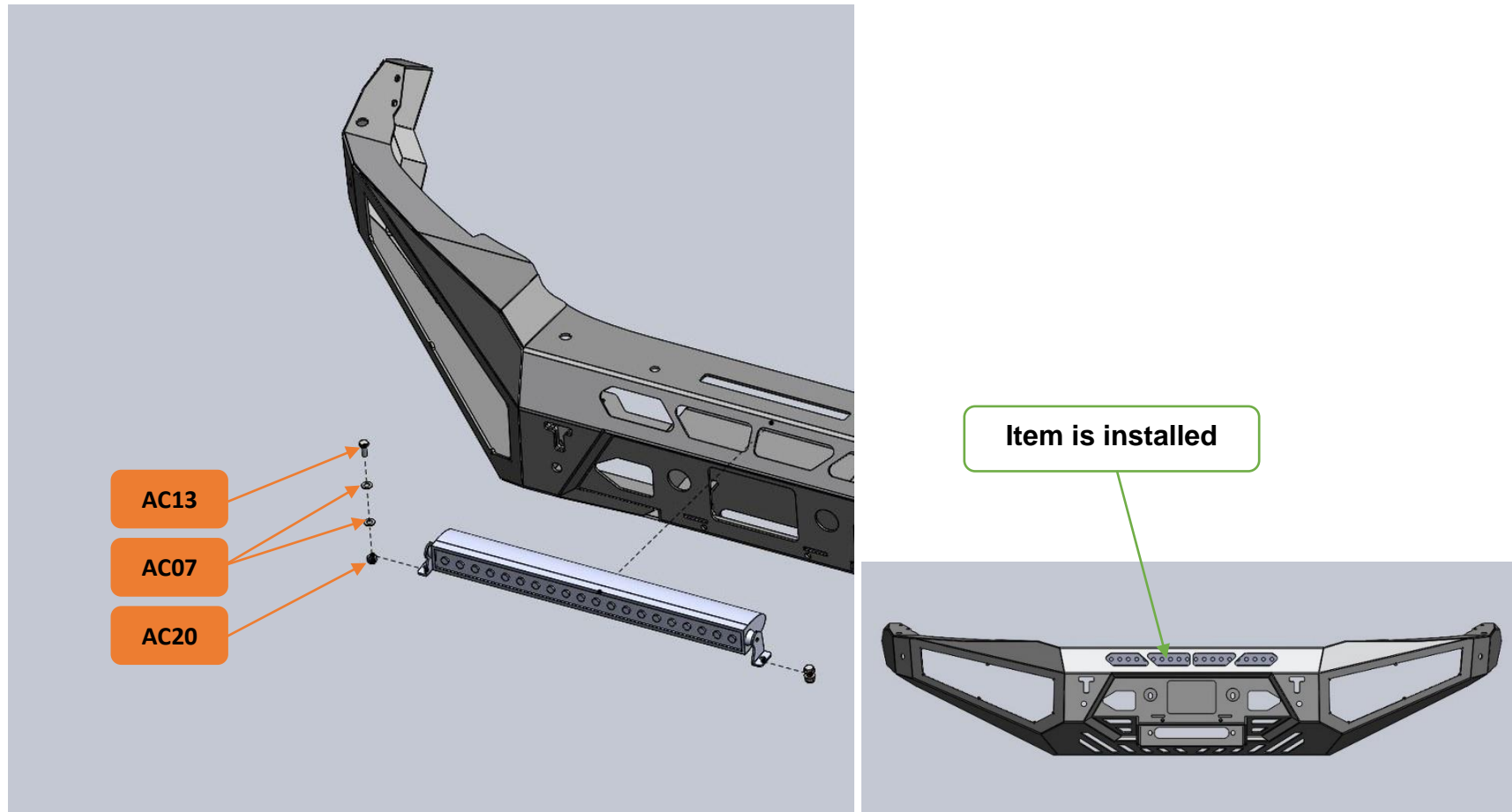
**AC04 x 10 pcs** : Steel Flat Washer M12 x 13mmID x 26mmOD x 2.2mmT

**AC14 x 02 pcs** : Steel Bolt M12 x 110 x P1.25 - 30mm Thread

**Bolt Tightening Torque: 88(Nm)**

WI-026-R1

**STEP 2.1:** Install Single LED Bar into the Bull Bar Body, bolted both sides with 2 positions.



**AC07 x 04 pcs** : Steel Flat Washer M8 x 8.4mmID x 17mmOD x 2.5mmT

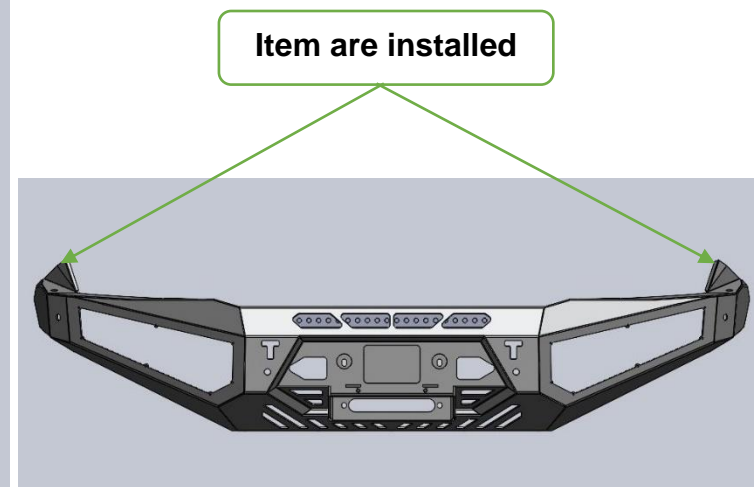
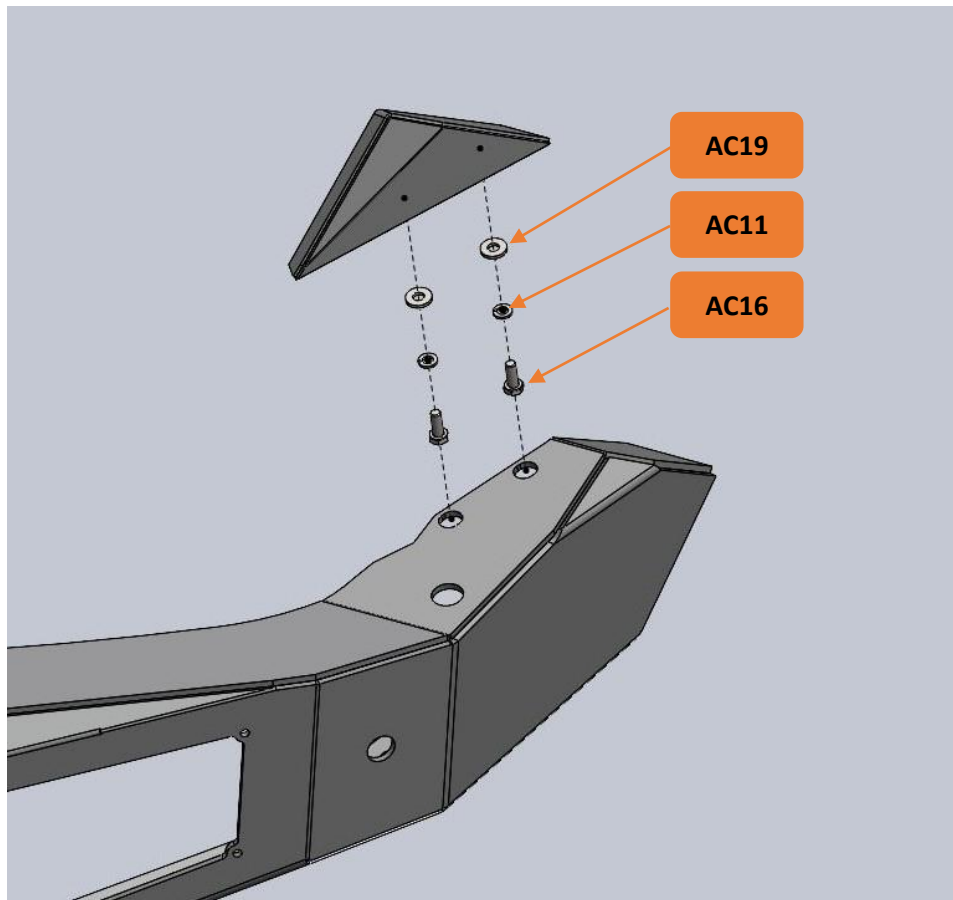
**AC13 x 02 pcs** : Hex Head Bolt M8 x 20mmL x P1.25

**AC20 x 02 pcs** : Nyloc Nut M8 x P1.25

**Bolt Tightening Torque: 24(Nm)**

WI-026-R1

**STEP 2.2:** Install Patch LH & RH into the Bull Bar Body, bolted both sides with 4 positions.



**AC11 x 04 pcs** : Steel Spring Washer M6

**AC16 x 04 pcs** : Hex Head Bolt M6 x 16mmL x P1.0

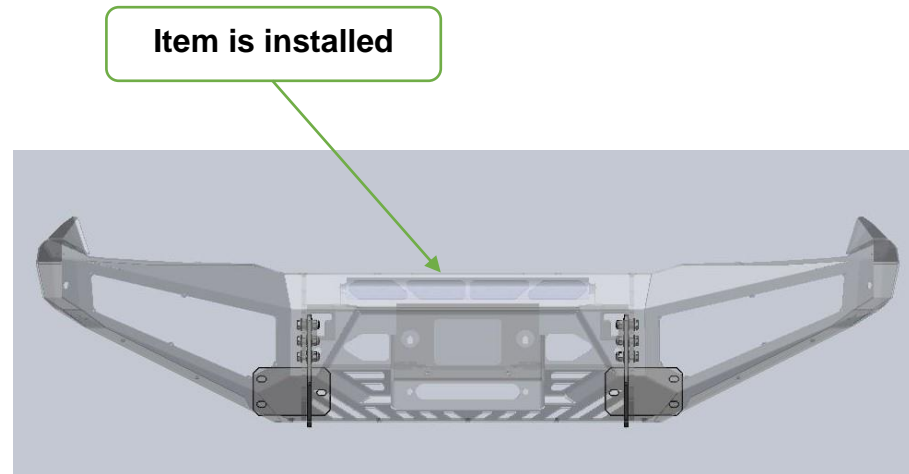
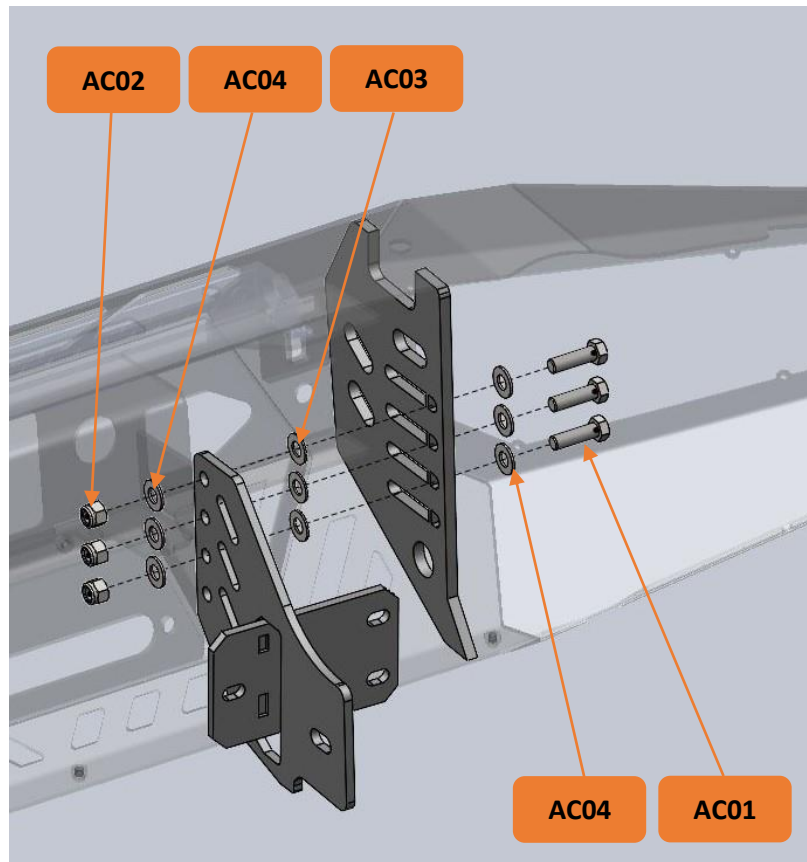
**AC19 x 04 pcs** : Steel Flat Washer M6 x 6.6mmID x 15mmOD x 2mmT

**Bolt Tightening Torque: 10(Nm)**



WI-026-R1

**STEP 2.3:** Install Bull Bar Body into the Car, bolted both sides with 6 positions.



**AC01 x 06 pcs** : Hex Head Bolt M12 x 40mmL x P1.25

**AC02 x 06 pcs** : Nyloc Nut M12 x P1.25

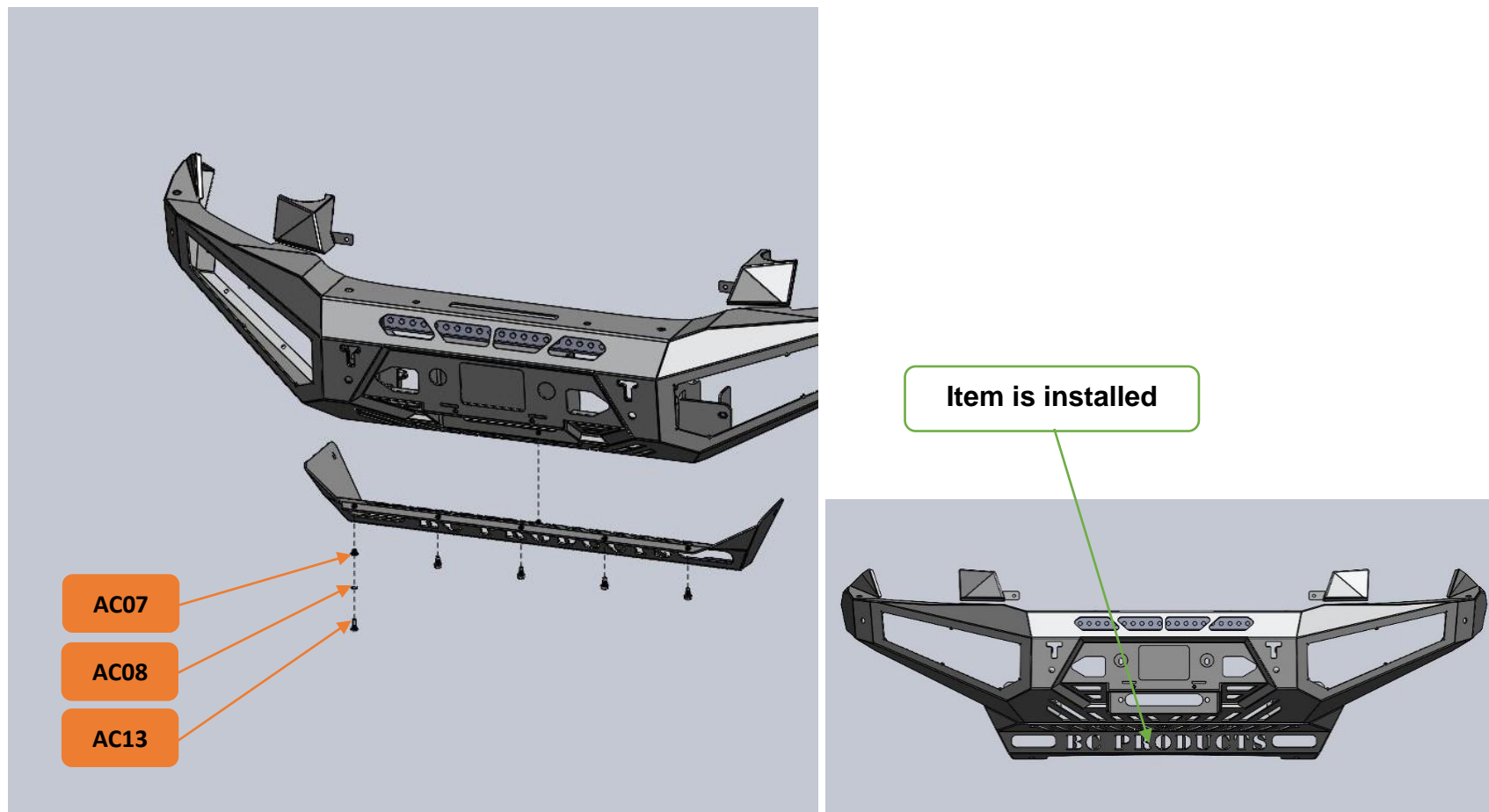
**AC03 x 06 pcs** : Steel Nord Lock Washer M12 x 13mmID x 19mmOD x 2.2mmT

**AC04 x 12 pcs** : Steel Flat Washer M12 x 13mmID x 26mmOD x 2.2mmT

**Bolt Tightening Torque: 88(Nm)**

WI-026-R1

**STEP 3.1:** Install Bottom Plate into the Car, bolted with 5 positions.



**AC07 x 05 pcs** : Steel Flat Washer M8 x 8.4mmID x 17mmOD x 2.5mmT

**AC08 x 05 pcs** : Steel Spring Washer M8

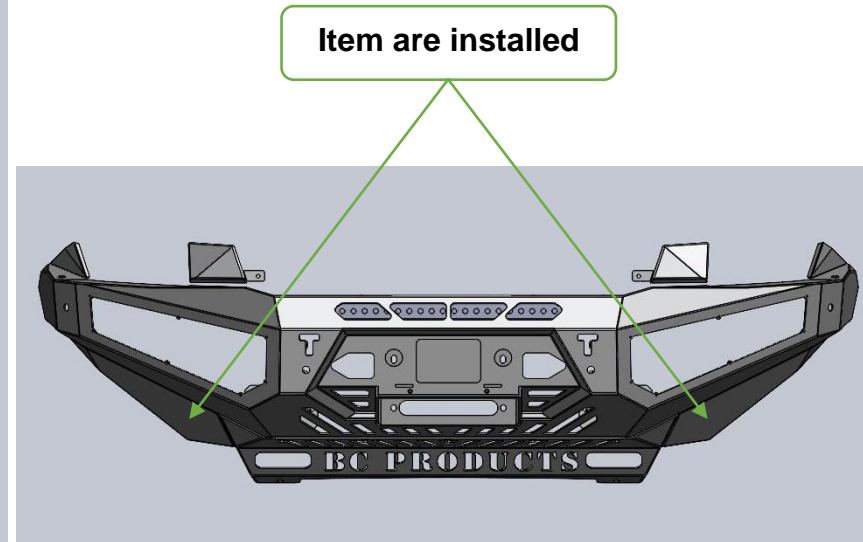
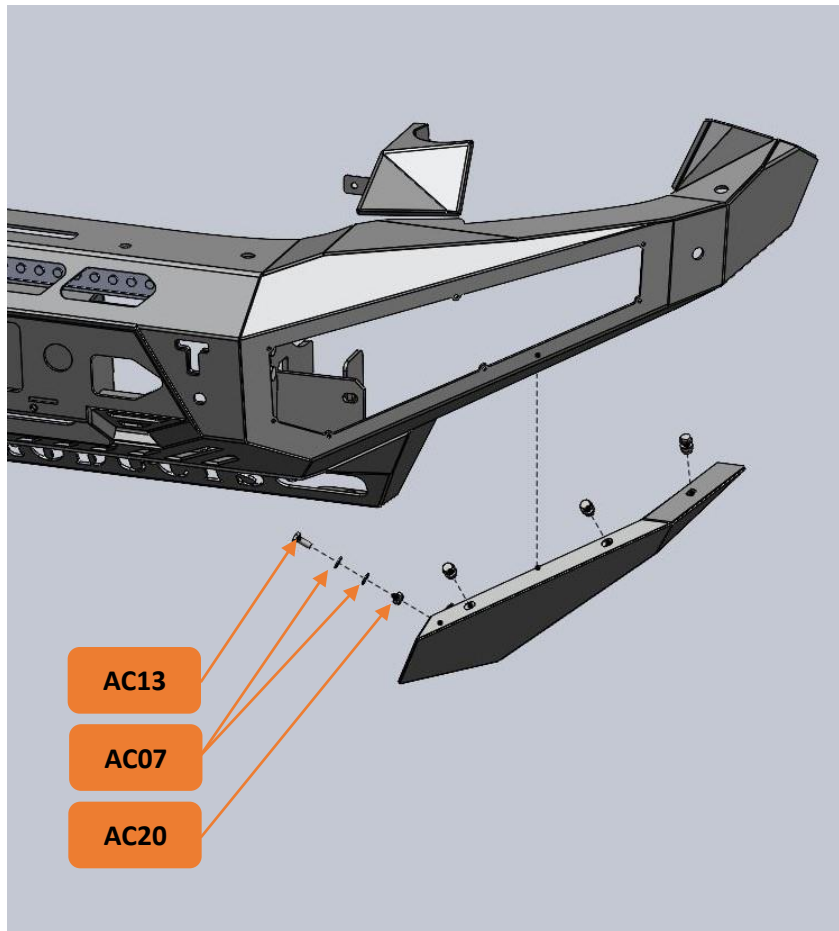
**AC13 x 05 pcs** : Hex Head Bolt M8 x 20mmL x P1.25

**Bolt Tightening Torque: 24(Nm)**



WI-026-R1

**STEP 3.2:** Install Bottom Cover RH & LH, bolted both sides with 8 positions.



**AC07 x 16 pcs** : Steel Flat Washer M8 x 8.4mmID x 17mmOD x 2.5mmT

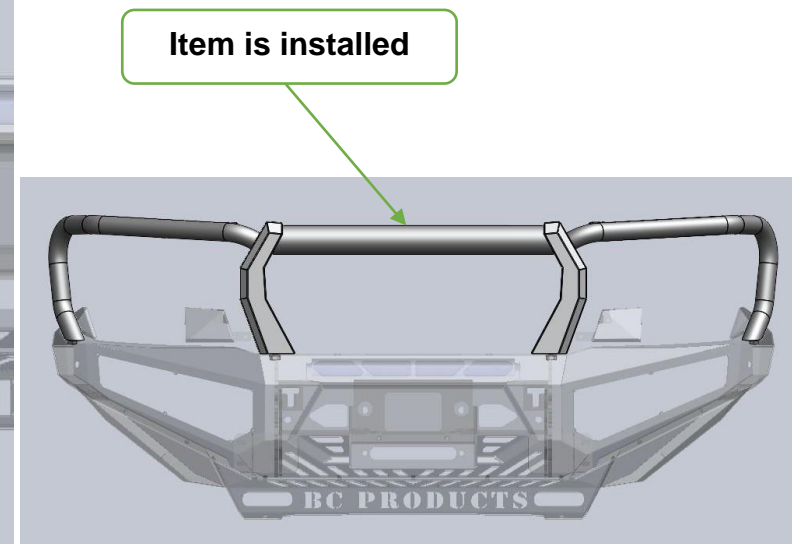
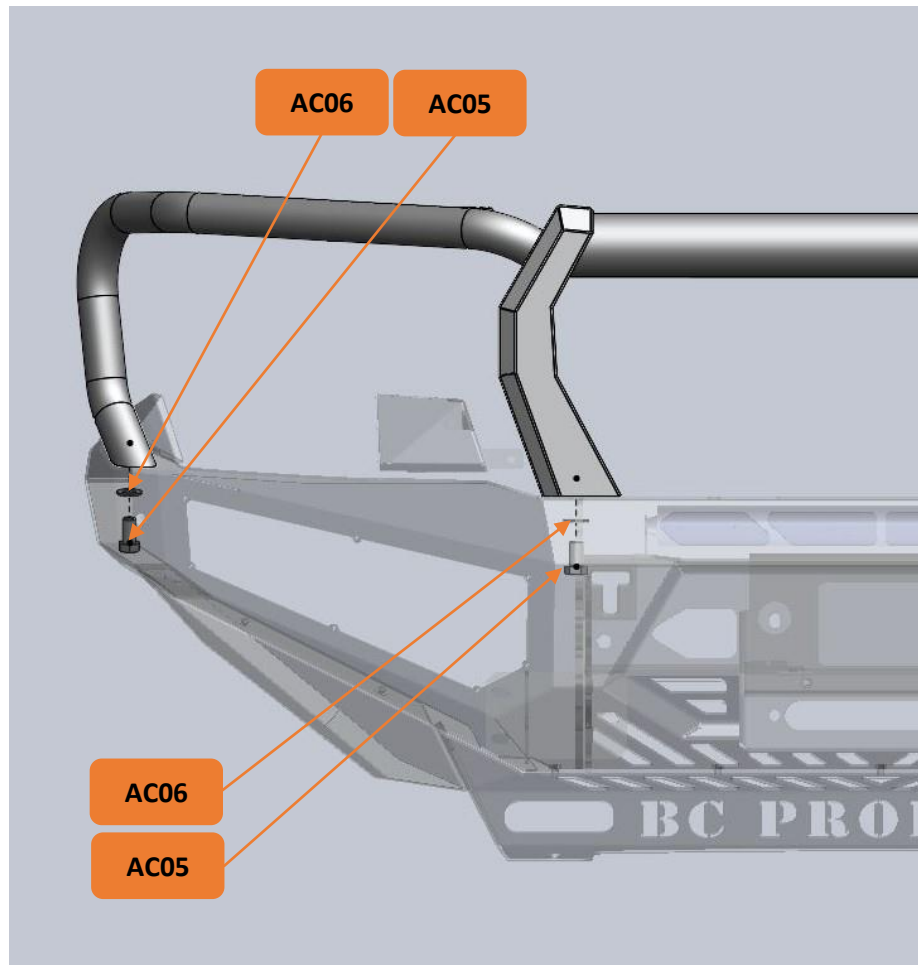
**AC13 x 08 pcs** : Hex Head Bolt M8 x 20mmL x P1.25

**AC20 x 08 pcs** : Nyloc Nut M8 x P1.25

**Bolt Tightening Torque: 24(Nm)**

WI-026-R1

**STEP 4.1:** Install Triple Hoop into the Car, bolted with 4 positions. **[Use for Triple Hoop only]**



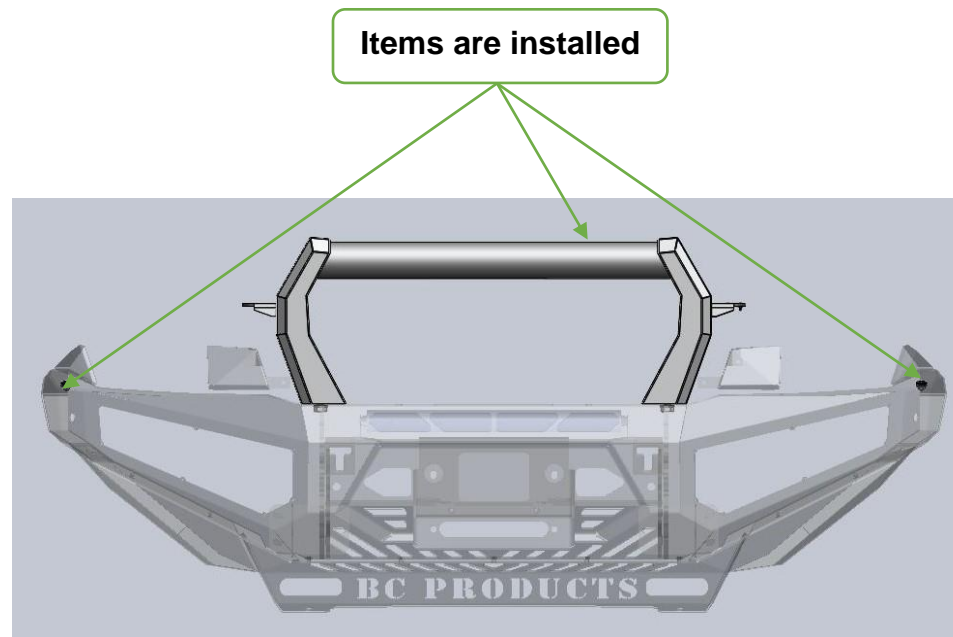
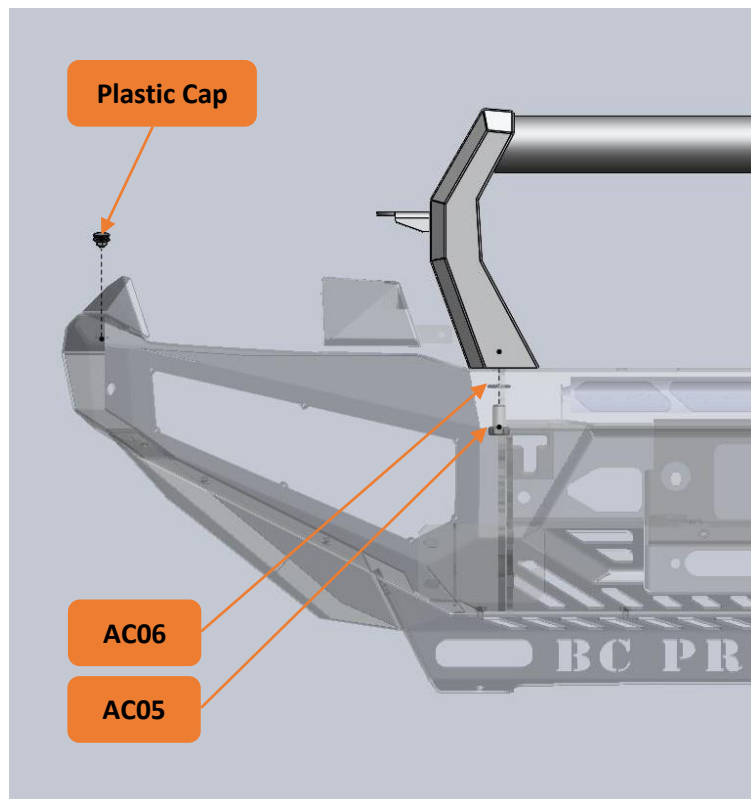
**AC05 x 04 pcs** : Hex Head Bolt M16 x 30mmL x P2.0

**AC06 x 04 pcs** : Steel Flat Washer M16 x 17mmID x 30mmOD x 2.5mmT

**Bolt Tightening Torque: 88(Nm)**

WI-026-R1

**STEP 4.2:** Install Single Hoop & Plastic Cap, bolted with 4 positions. [Use for Single Hoop only]



Plastic Cap x 02 pcs

Bolt Tightening Torque: 3(Nm)

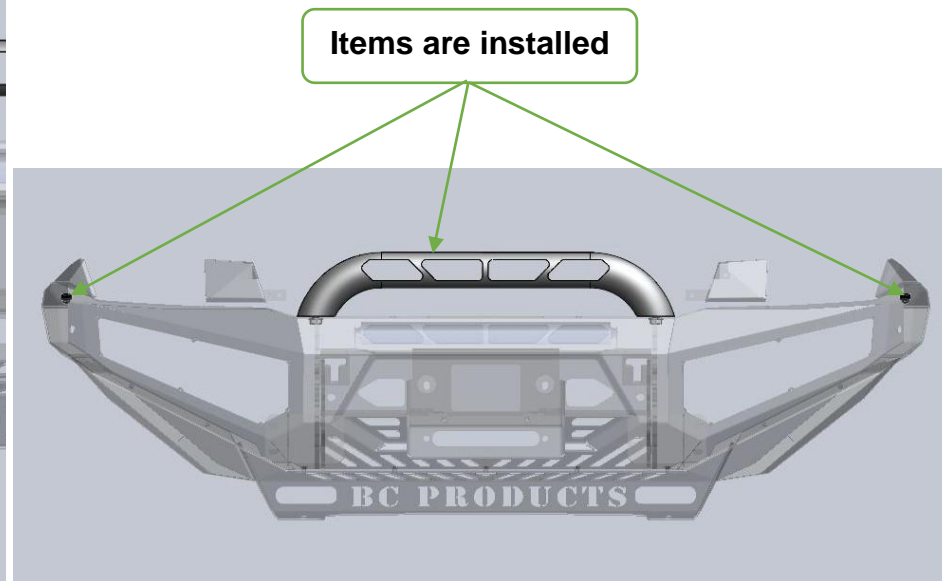
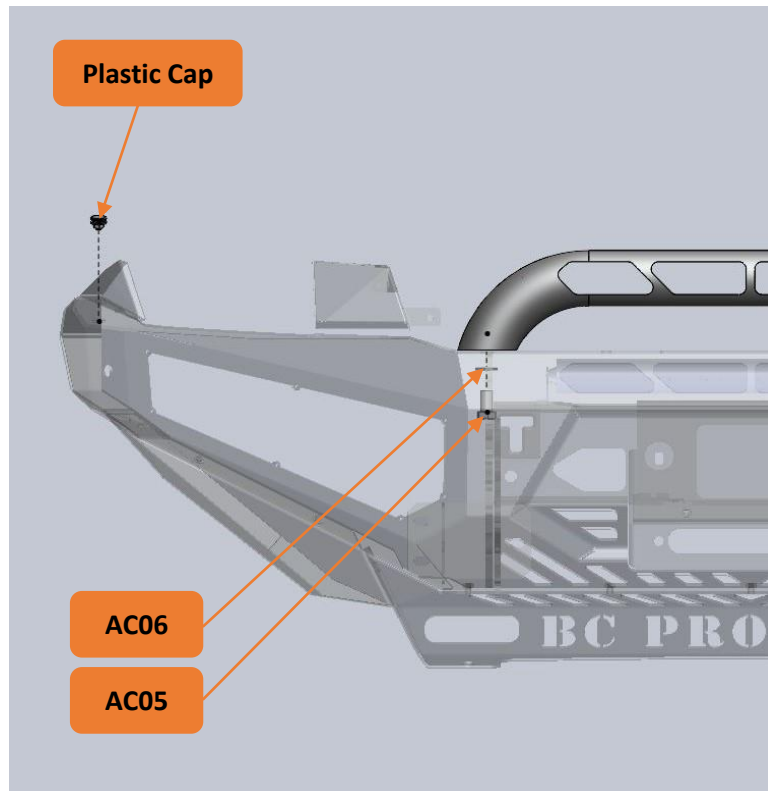
AC05 x 02 pcs : Hex Head Bolt M16 x 30mmL x P2.0

AC06 x 02 pcs : Steel Flat Washer M16 x 17mmID x 30mmOD x 2.5mmT

Bolt Tightening Torque: 88(Nm)

WI-026-R1

**STEP 4.3:** Install Low Hoop & Plastic Cap, bolted with 4 positions. **[Use for Low Hoop only]**



Plastic Cap x 02 pcs

Bolt Tightening Torque: 3(Nm)

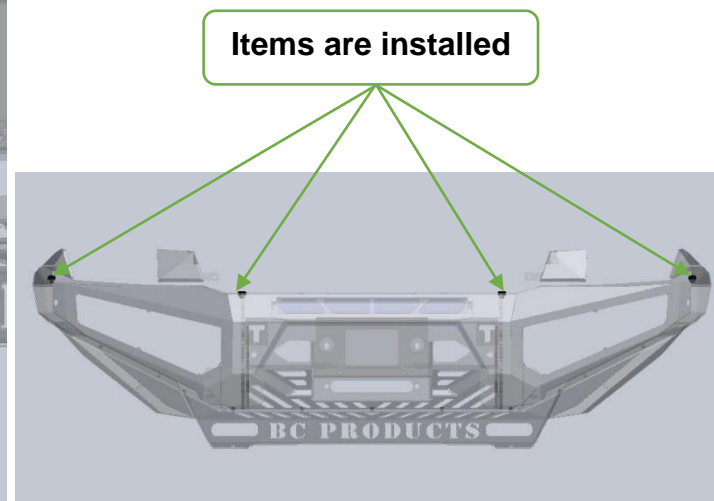
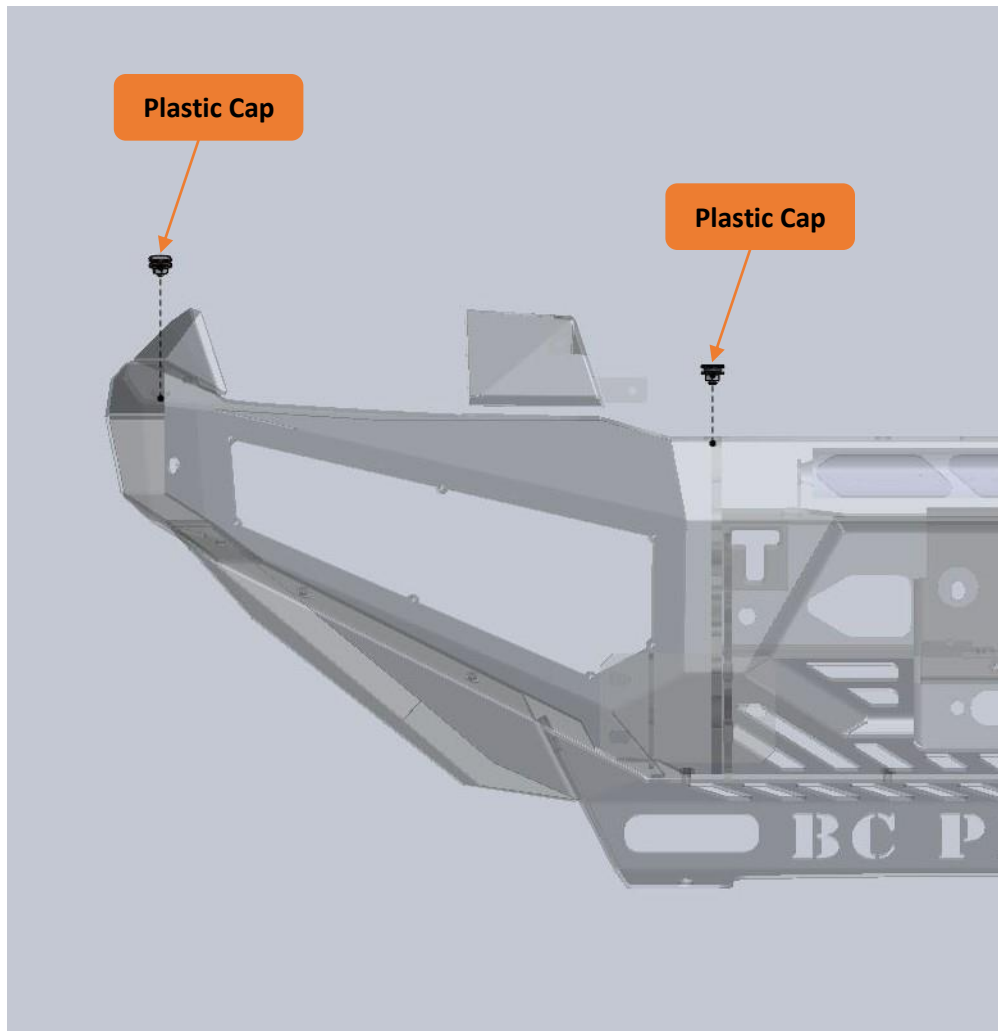
AC05 x 02 pcs : Hex Head Bolt M16 x 30mmL x P2.0

AC06 x 02 pcs : Steel Flat Washer M16 x 17mmID x 30mmOD x 2.5mmT

Bolt Tightening Torque: 88(Nm)

WI-026-R1

**STEP 4.4:** Install Plastic Cap, bolted with 4 positions. **[Use for No Hoop only]**

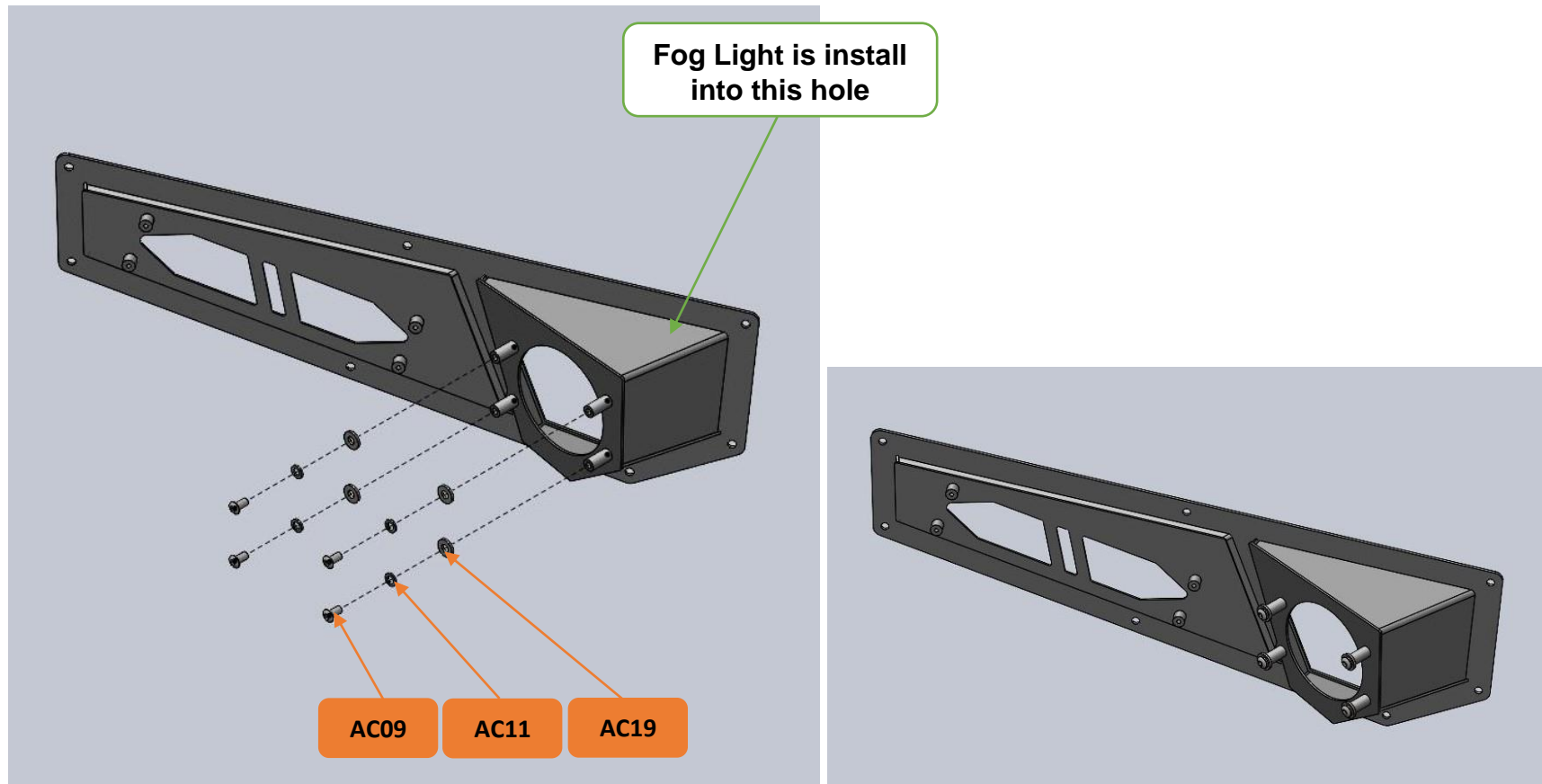


Plastic Cap x 04 pcs

Bolt Tightening Torque: 3(Nm)

WI-026-R1

**STEP 5.1:** Install Fog Light into Light Panel LH & RH, bolted both sides with 8 positions.



AC31 x 01 pcs : Fog Lights (Pair) with Accessories

AC09 x 08 pcs : M6 x 12mmL x P1 Steel Hex socket (allen Key) & Domed Head Bolt

AC11 x 08 pcs : Steel Spring Washer M6

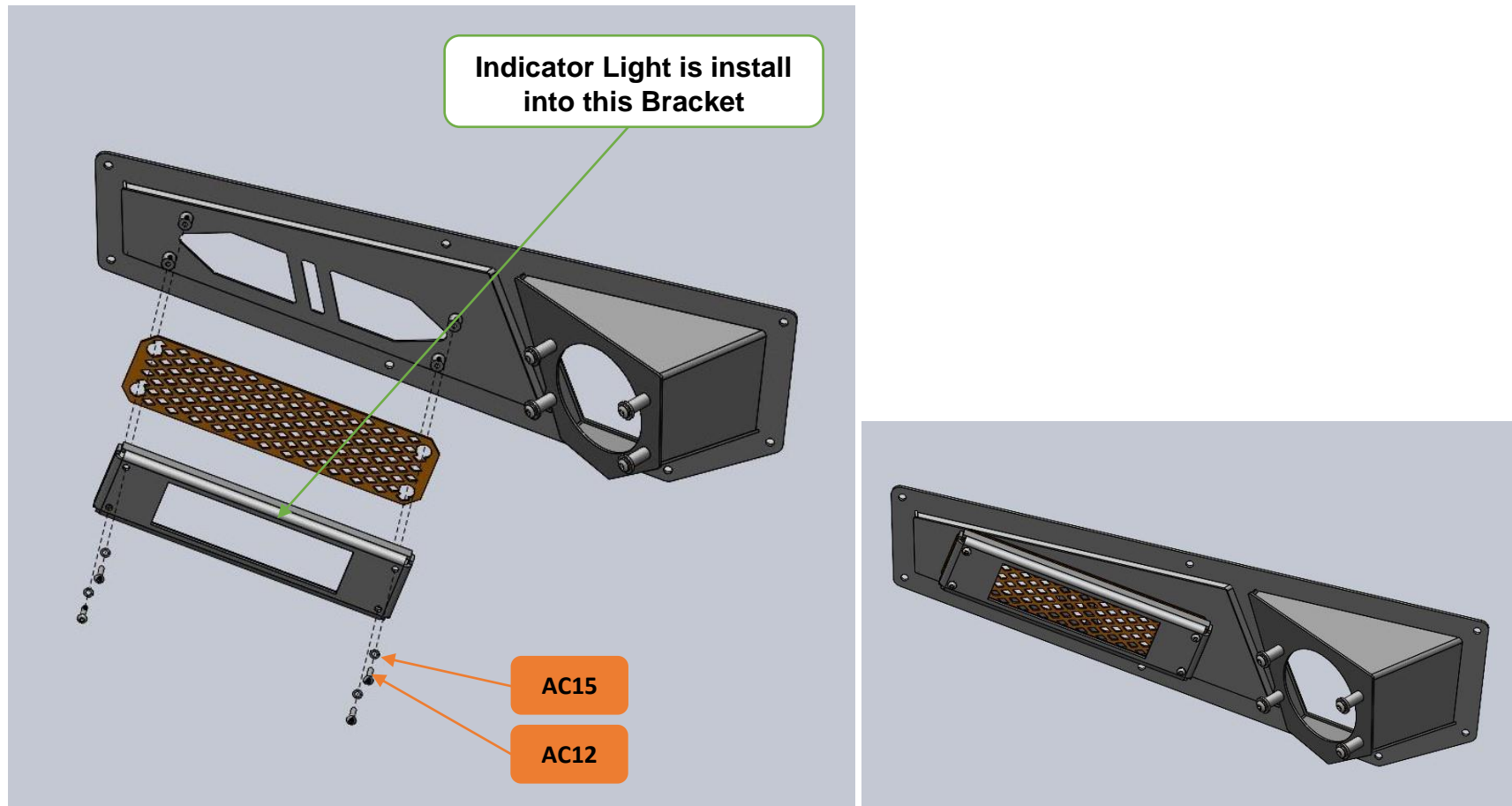
AC19 x 08 pcs : Steel Flat Washer M6 x 6.6mmID x 15mmOD x 2mmT

**Bolt Tightening Torque: 10(Nm)**



WI-026-R1

**STEP 5.2:** Install Indicator Light into Light Panel LH & RH, bolted both side with 8 positions.



**AC32 x 01 pcs :** Indicator Lights (Pair)

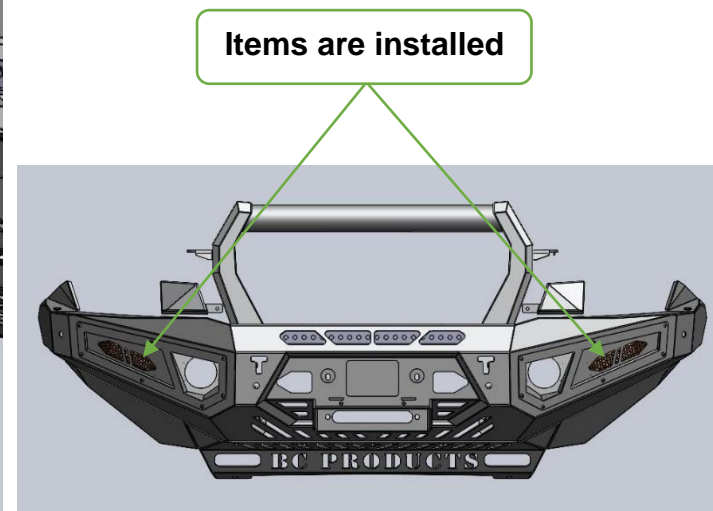
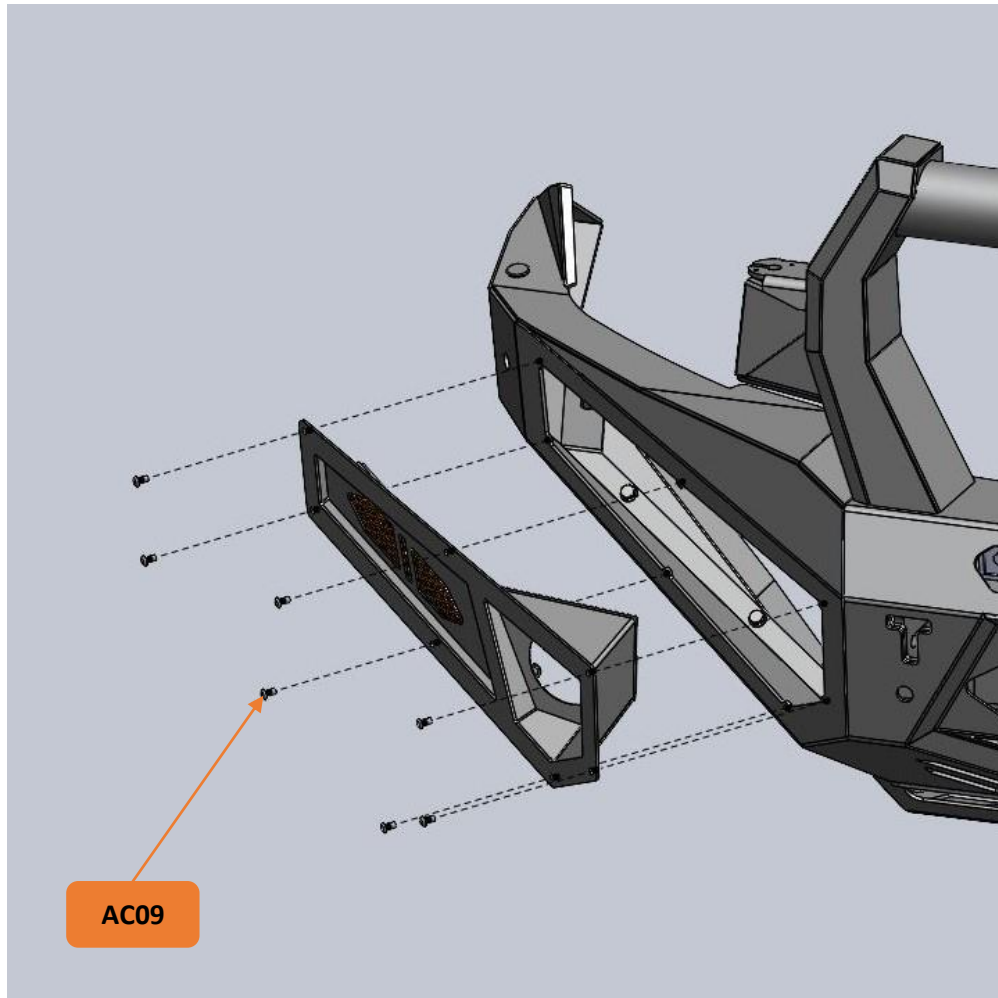
**AC12 x 08 pcs :** M4 x 16mmL x P0.7 Hex socket (allen Key) & Domed Head Bolt

**AC15 x 08 pcs :** Steel Spring Washer M4

**Bolt Tightening Torque: 3(Nm)**

WI-026-R1

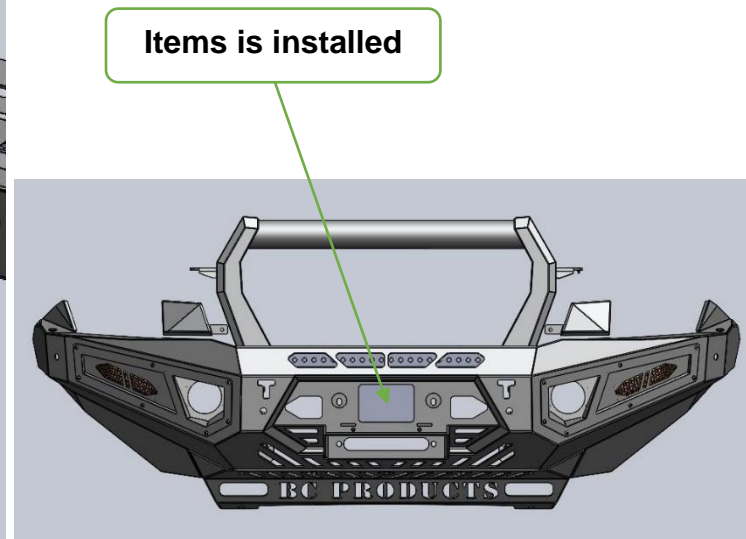
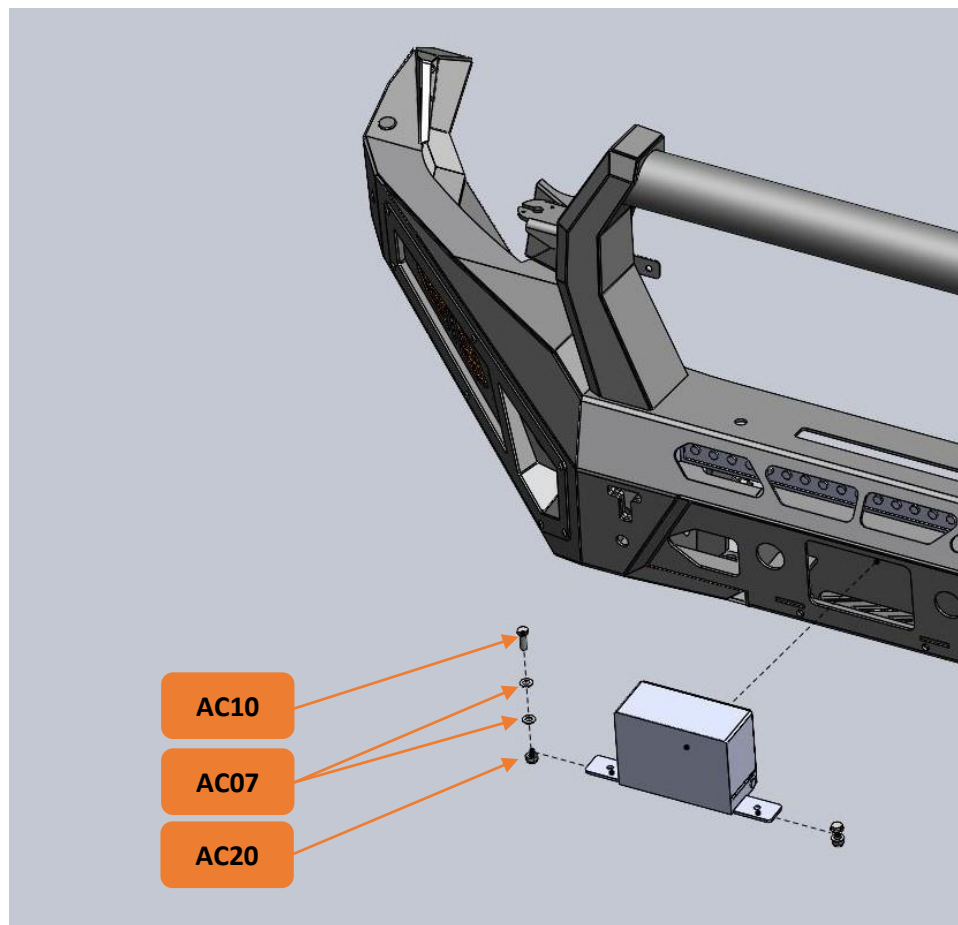
**STEP 5.3:** Install Light Panel LH & RH, bolted both sides with 14 positions.



**AC09 x 14 pcs :** M6 x 12mmL x P1 Steel Hex socket (allen Key) & Domed Head Bolt  
**Bolt Tightening Torque: 10(Nm)**

WI-026-R1

**STEP 6: Install Radar, bolted with 2 positions.**



**AC07 x 04 pcs** : Steel Flat Washer M8 x 8.4mmID x 17mmOD x 2.5mmT

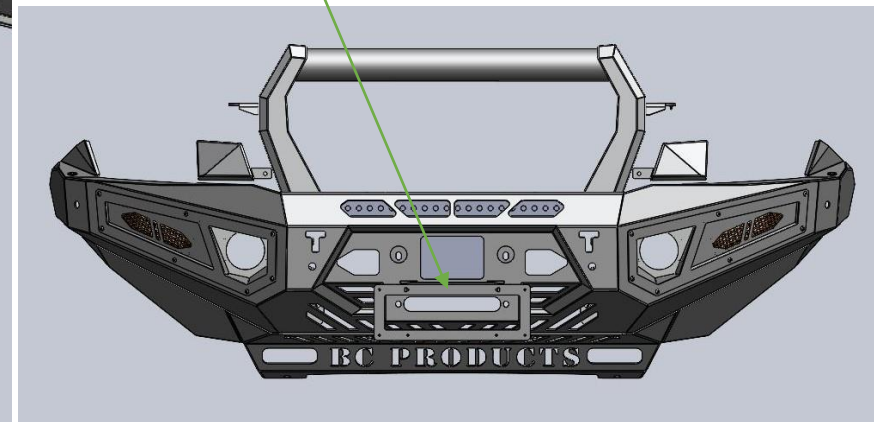
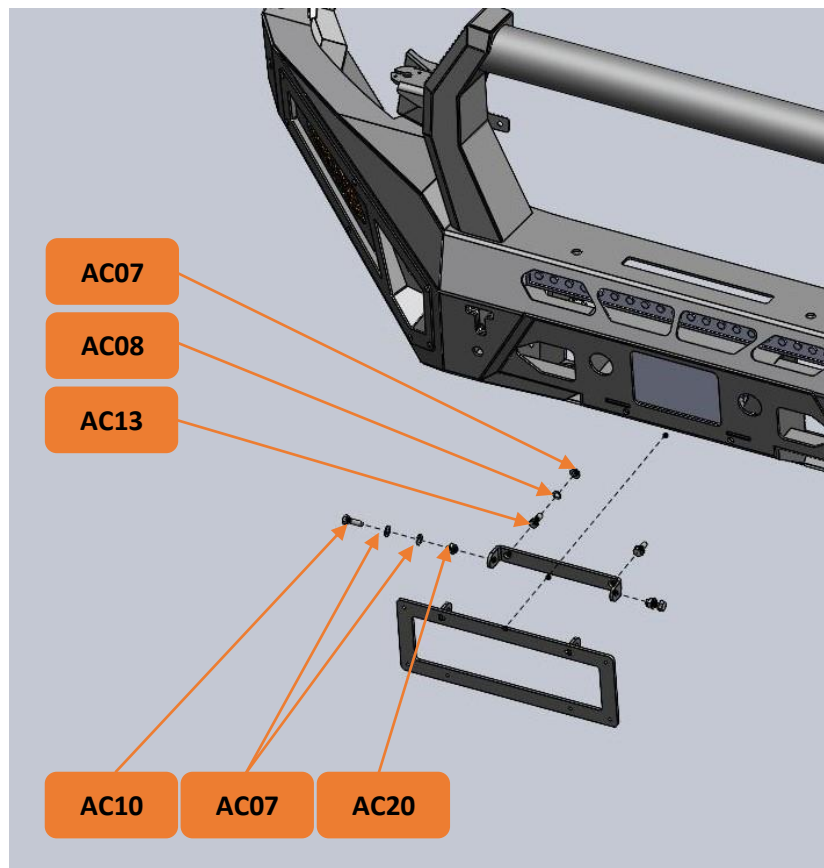
**AC10 x 02 pcs** : Hex Head Bolt M8 x 25mmL x P1.25

**AC20 x 02 pcs** : Nyloc Nut M8 x P1.25

**Bolt Tightening Torque: 24(Nm)**

WI-026-R1

**STEP 7.1: Install License Plate Bracket, bolted with 4 positions.**



**AC07 x 06 pcs** : Steel Flat Washer M8 x 8.4mmID x 17mmOD x 2.5mmT

**AC08 x 02 pcs** : Steel Spring Washer M8

**AC10 x 02 pcs** : Hex Head Bolt M8 x 25mmL x P1.25

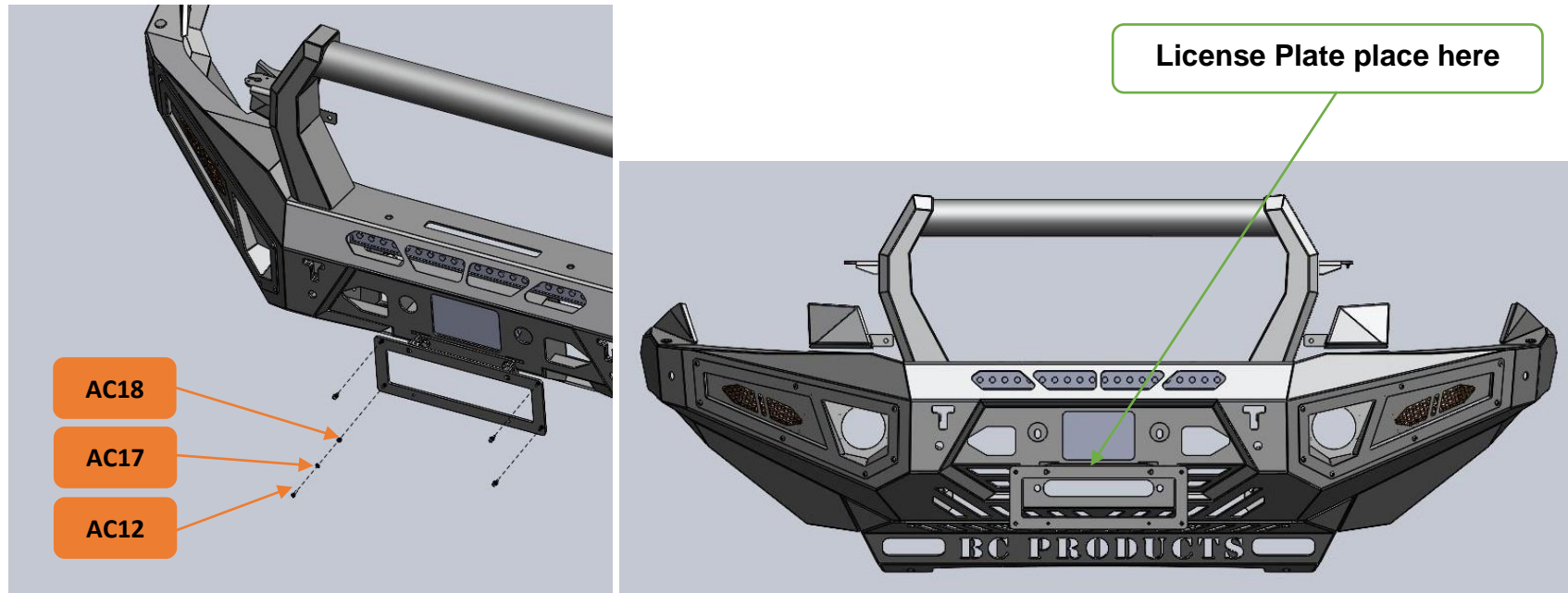
**AC13 x 02 pcs** : Hex Head Bolt M8 x 20mmL x P1.25

**AC20 x 02 pcs** : Nyloc Nut M8 x P1.25

**Bolt Tightening Torque: 24(Nm)**

WI-026-R1

**STEP 7.2: Install License Plate, bolted with 4 positions.**



**AC12 x 04 pcs** : M4 x 16mmL x P0.7 Hex socket (allen Key) & Domed Head Bolt

**AC17 x 04 pcs** : Steel Flat Washer M4 x 4.3mmID x 9mmOD x 0.8mmT

**AC18 x 04 pcs** : Nyloc Nut M4 x P0.7

**Bolt Tightening Torque: 3(Nm)**

**Recommendation:**

Due to the variation of vehicle chassis some shimming may be required by using the extra washers supplied (**AC04**) to assist in lining up the bar where required.

----- END -----