**TOOLS NEEDED**
- Welder
- 2 Adjustable Wrenches
- Angle Finder
- Clamps
- 13mm Socket or Wrench x2

**OPTIONAL TOOLS**
- Dead-blow Hammer
- Vice

**HARDWARE**
- 18 - 7/16 x 1 Hex Bolts (Not Included)
- 8 - 7/16 Nuts Raw (Not Included)
- 10 - 7/16 Nuts Not Raw (Not Included)

Please read the mounting instructions below carefully before attempting to install.
The first piece you will want to bend will be the (01) Bumper Face / Center Section. You will be bending 1 angle. It doesn’t matter which side you make the front face.

A  Clamping the Center Section to a table, bend down the first 45° angle.

Set the bent Center Section (01) off to the side. Next you will be bending the Winch Plate (04).

A  Clamping the Winch Plate to a table, bend up the first 90° angle. (Bend 1)
B  Re-clamp the Winch Plate and bend the other side to 90° as well. (Bend 2)
3  You will now be bending the two Top Wings (02). ***You will need to bend a Right and Left, which will end up having two wings that are opposites.***
   A  Clamping the wing to a table, bend all three sections to 90°.
   B  Repeat on the second Wing (02).

4  Next you will be bending the Lower Wing Caps (03). ***You will need to bend a Right and Left, which will end up having two wings that are opposites.***
   A  One bend, to 80°.
5 With all of the Bumper Parts Bent, it’s time to start tacking things together!

A Laying the Top Wing (02) face down, tack weld on the Lower Wing Caps (03).

6 With the bumper tacked together, it is now time fully weld the bumper together. We recommend welding the back side first.
Shown below is the Center Section (01) with both left and right wings tack welded in place.

With the bumper still face down on the table, insert the Winch Plate (04). Assure proper fit and tack into place.

Now that the entire bumper is tacked together, it’s time to fully weld and grind the bumper!
10 After finishing the welding and grinding, it’s time to install the Dring Tabs (DRT).

11 With the Dring Tabs (DRT) tacked into place, tack weld in the Bumper Mounts (05). You will notice that the mounting bracket will rest against the inside of the Dring Tab.

12 Make sure the Bumper Mounts (05) are square. The inside of brackets measurement from Driver side to Passenger side should be 32.5” It is best to leave the Dring Tabs and Mounts tacked into place until after test fitting the bumper on the Jeep.
13 Now we tackle the Frame Mounts (06). Assemble the 7/16” hardware and tack weld the nuts to the brackets as pictured below. ***You will need to bend a Right and Left, which will end up having two wings that are opposites.***

14 Set the Frame Mounts off to the side and grab the Bulkhead Mounts (07).

   A The Mounts each get one 90° bend and then welded. ***You will need to bend a Right and Left, which will end up having two wings that are opposites.***
In order to install the Frame Mounts (06), you will need to open up the front oval holes in the factory bulkhead.

Tests fit the mounts and trim more where necessary.
18 On the ends of each side of the factory bulkhead are two pinch seams. These seams will need to be bent over before fitting the bumper. As shown with the red lines below, bend the lower seam underneath and the front seam over to the front.

19 With the Frame Mounts installed and bulkhead seams modified, you may now test fit the bumper! Once you have verified the mounting brackets lining up correctly with the frame mounts, you can finish welding the Dring Tabs and Bumper mounts into place!

20 Once the bumper is 100% complete, it is highly recommend that you test fit the bumper before painting, as some adjustments may need to be made. Also, if you wanted to mount a hoop, now would be the time to weld that hoop onto the bumper.
Before you start assembling, use the following photo to make sure you have all your parts. Contact JcrOffroad if you have any questions.

Parts List

- ZJFDIY01: Bumper Face/Center Section
- ZJFDIY02: Top Wings
- ZJFDIY03: Lower Wing Caps
- ZJFDIY04: Winch Plate
- ZJFDIY05: Bumper Mounts
- ZJFDIY06: Frame Mounts
- ZJFDIY07: Bulkhead Mounts
- DIY-DRT: Dring Tabs

NOT INCLUDED

- 18 - 7/16 x 1 Hex Bolts
- 8 - 7/16 Nuts Raw
- 10 - 7/16 Nuts Not Raw

JcrOffroad can not be held responsible for miss-assembly or faulty assembly. It is your responsibility to be able to properly weld this product together. Extreme care should be taken to ensure that the person welding is duly qualified and has experience with the process.