HPC hydraulics

INSTALLATION MANUAL

MOUNTING PLATES FORD 2014 -

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Please read this manual carefully and keep it for future reference.

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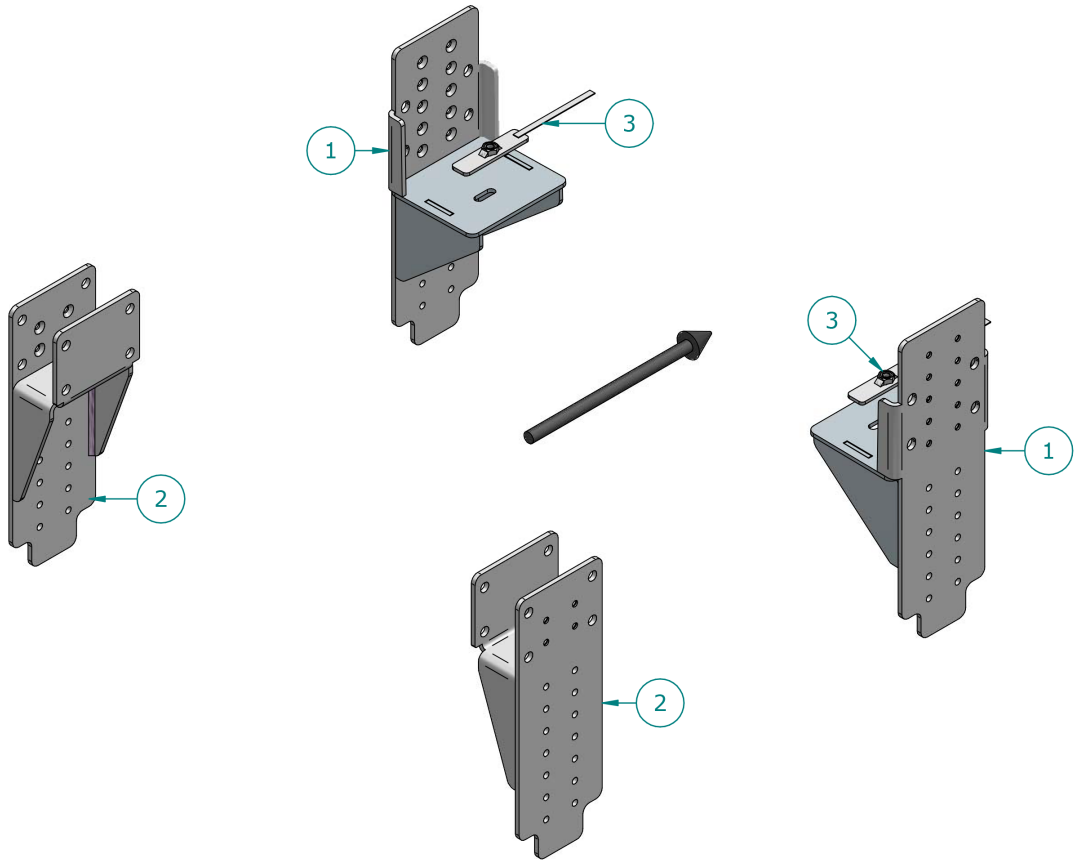
WARNING!

READ THIS MANUAL CAREFULLY BEFORE INSTALLATION

This manual is intended for installing mounting plates for both the front and rear of a Ford with a build year of 2014 or higher.

The set consists of a left- and right mounting plates for the front and back. The mounting plates are supplied with corresponding bolts and nuts.

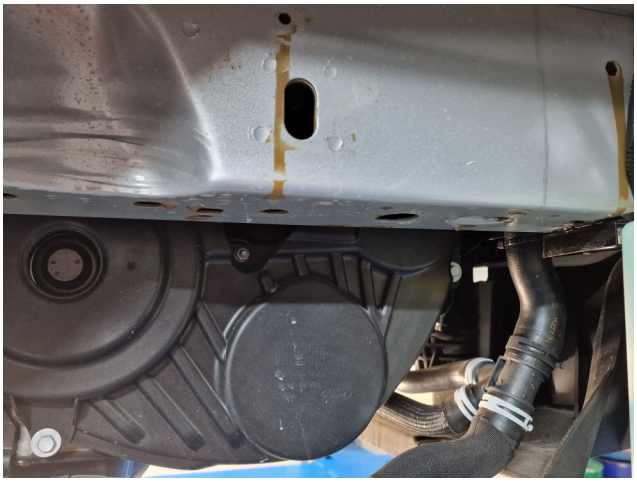


Item Number	Discription	Quantity
1	Bracket Front	2
2	Bracket Rear	2
3	Mounting Plate - Bracket Font	2

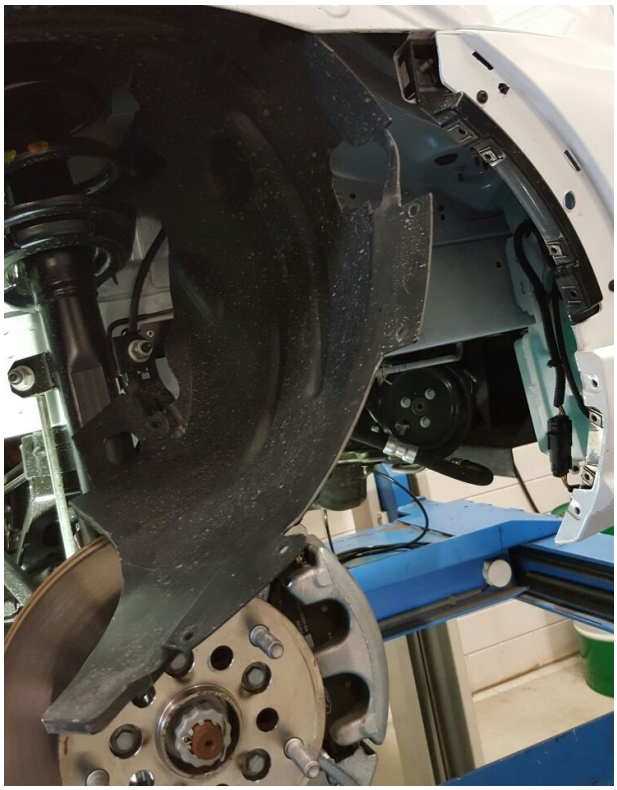
MOUNTING THE FRONT - RIGHT SIDE

Although the jacks should normally be mounted close behind the wheel, this is not possible with the Ford chassis. That is why it was decided to mount the jacks in front of the wheels.

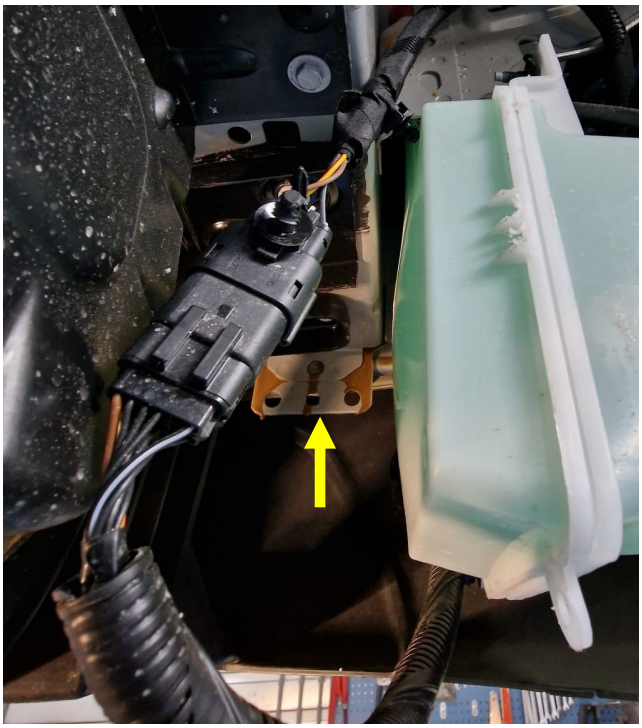
Before you can start mounting the front plates to the chassis, remove the front wheels so there is more space to work. Also unscrew part of the wheel arch covers, these don't need to be removed completely you can bend them slightly, so there is enough space. See the picture on the bottom left of this page. We will now start on mounting the front right plate.



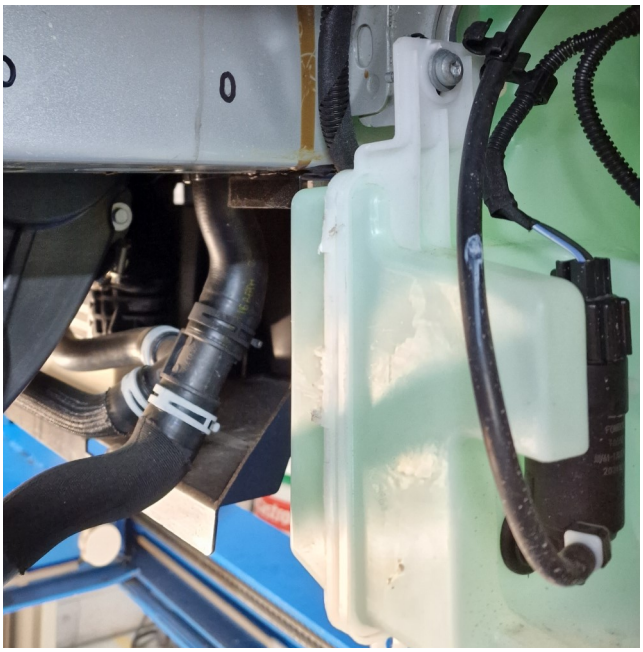
Remove the protective cover as shown in the picture above, so the bracket can be mounted against the bottom of the chassis. Before we can position the mounting plate we need to remove parts of the tank shown below. The two lips that hold the cable need to be removed.



MOUNTING THE FRONT - RIGHT SIDE



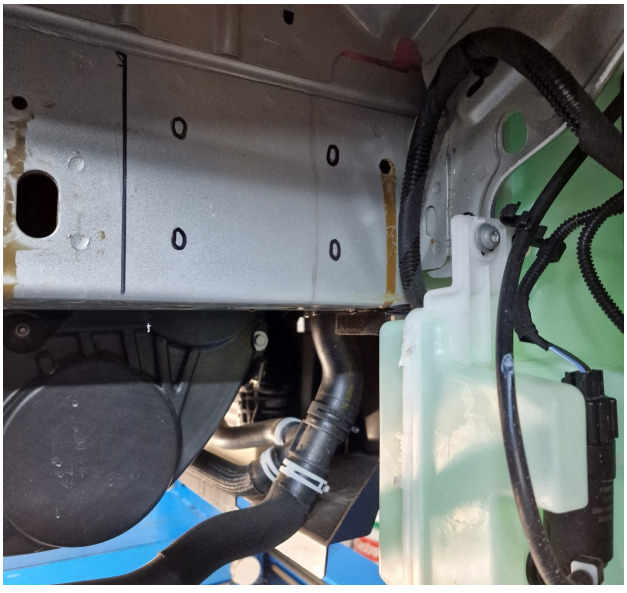
Remove both cable holders by pushing them out of the mounting lips. Both mounting lips need to be cut off close to the edge. Secure the cable before you start cutting, use the mounting lip shown in the right picture above. You can use tie-wraps to secure the cable.



When the cable is out of the way and secured, you can start cutting of the two mounting lips of the tank. Do this slow and secure so you don't damage anything. We can now start marking the mounting plate on the chassis.

MOUNTING THE FRONT - RIGHT SIDE

Use a tape measure to make sure the line is roughly on the same position as shown. From the corner measure around 18,5cm / 7,28 inch, and place a straight line. Position the bracket on the line and make sure the mounting plate is firmly positioned against the bottom of the chassis. Mark the four mounting holes.

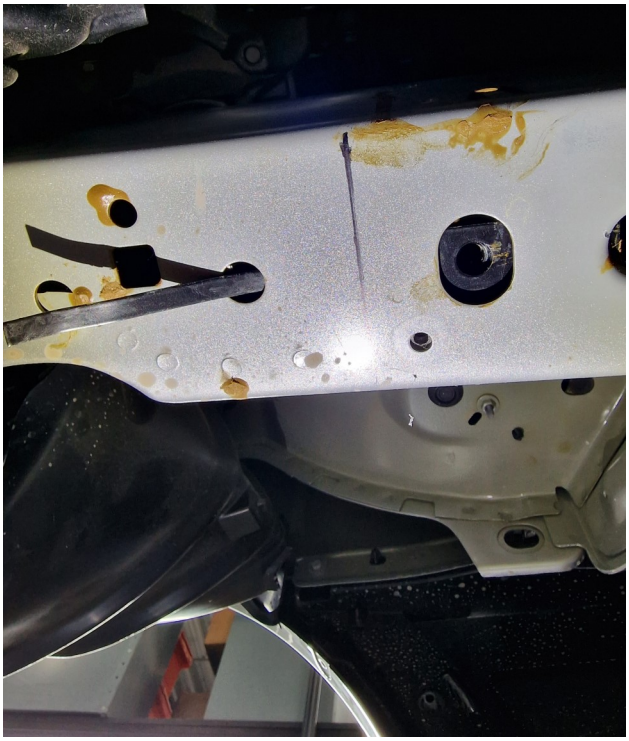


Make sure the mounting plate didn't shift during marking, you can check this by measuring the holes from the bottom of the chassis. Make sure they are on the same height measured from the bottom of the chassis.

Drill the 4 holes with a 12mm (31/64 inch) metal drill bit.

MOUNTING THE FRONT - RIGHT SIDE

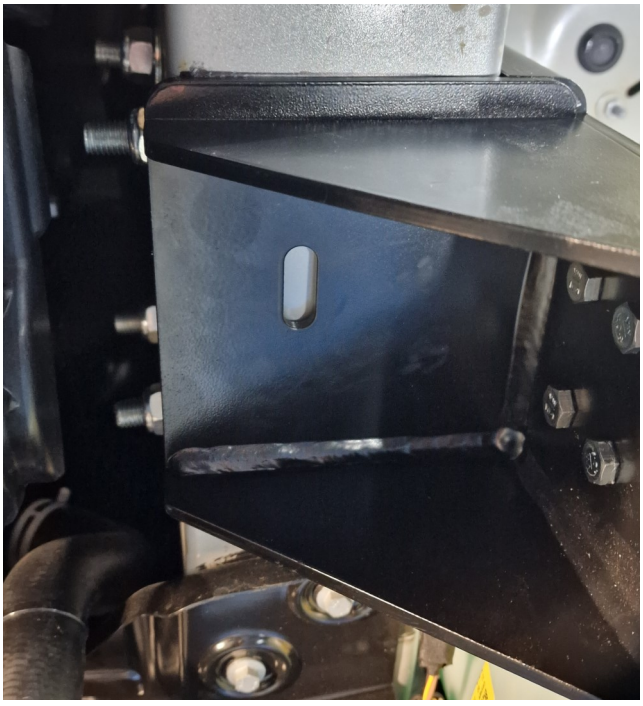
Before mounting the front mounting plate, there is a thread from the chassis that needs to be removed. Cut the thread as shown in the picture above, make sure to paint or use anti-corrosion filler so the blank metal won't rust.

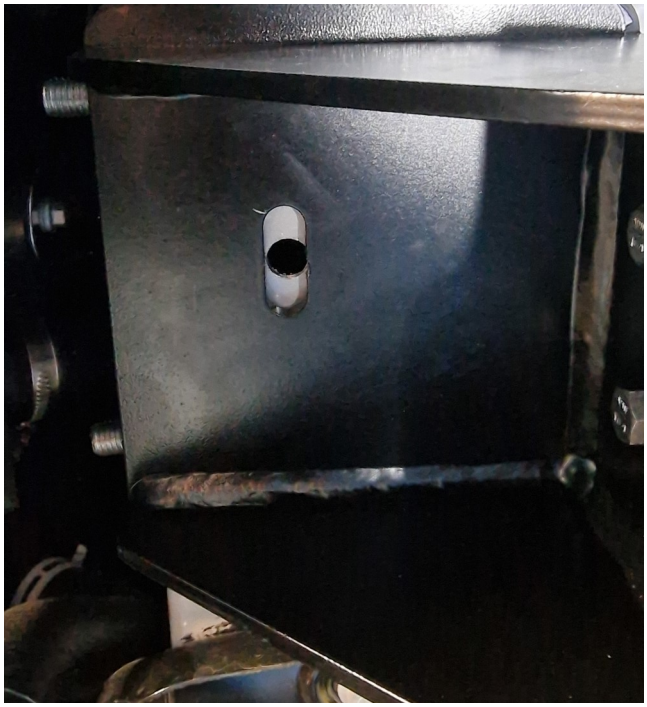


Before mounting the plate to the chassis, first place the **Mounting Plate - Bracket Font** in the chassis as shown in the picture above. Use the lager hole in the chassis to put the plate into it.

MOUNTING THE FRONT - RIGHT SIDE

Before we can fix the mounting plate against the chassis. Make sure the jack is pre-assembled on the mounting plate. Use at least 12 M8 x 20 bolts per jack, make sure the bolts are divided over the whole jack. Make sure the hydraulic connections are facing the right way, see picture above.
Fix the mounting plate on the chassis with the four M12 x 160 Bolts, M12 Rings and the M12 Locknuts. Make sure the mounting plate is placed against the bottom of the chassis.

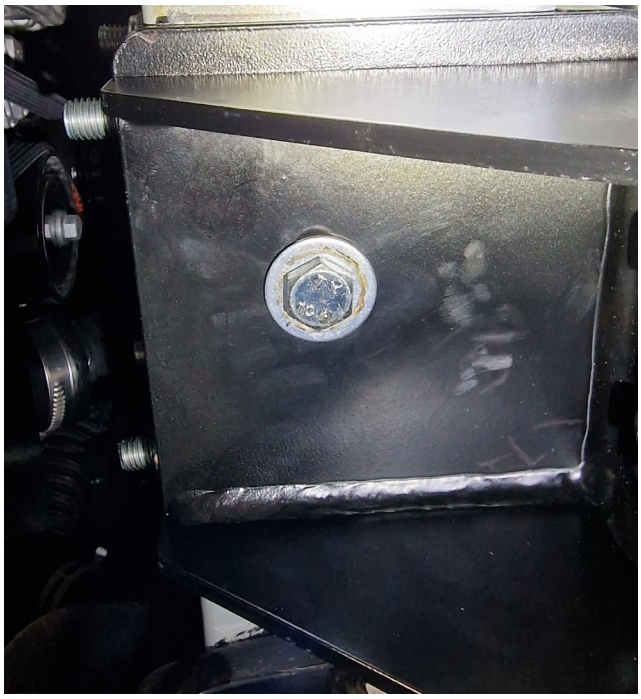




Now the bottom part needs to be secured on the chassis. Drill an 10mm (0,395 inch) hole in the bottom of the chassis.

MOUNTING THE FRONT - RIGHT SIDE

We will now use the **Mounting Plate - Bracket Font** we placed in the chassis to fix the bottom of the mounting plate to the chassis. Use the M10 x 30 Bolt together with the spring washer. If the bracket is not fully against the bottom of the chassis, loosen the 4 M12 locknuts and first tighten the bottom.

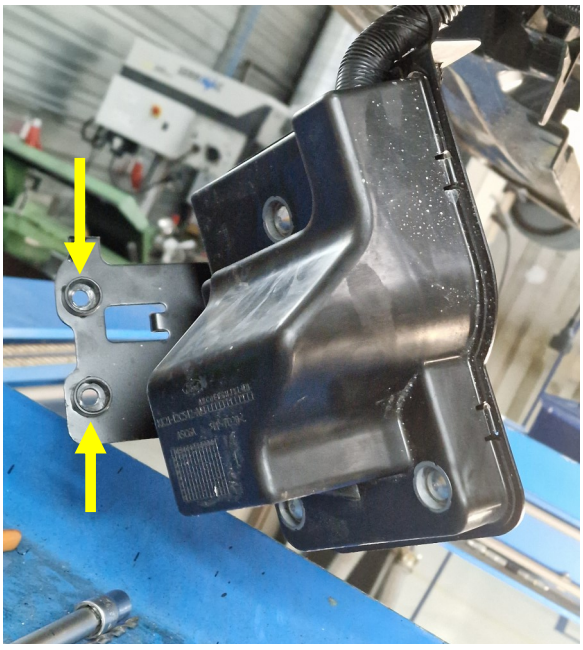


Make sure all the bolts and locknuts are tighten accordingly with the correct tightening moments.

The front right side is now finished. Place the protective cover back on the chassis, as well as the wheel arch cover. It is possible the protective cover needs to be adjusted, adjust it and make sure it will fit back on the chassis the correct way.

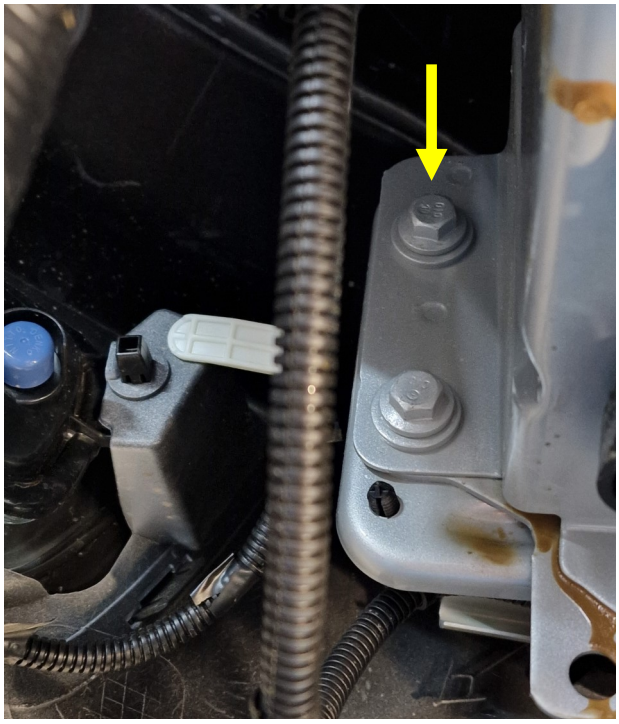
MOUNTING THE FRONT - LEFT SIDE

If you haven't removed the front left wheel yet, please do. Unscrew parts of the wheel arch cover and bend it back as shown in the picture above. If the vehicle got an automatic gearbox, the gearbox module will be in the way. This module needs to be relocated.

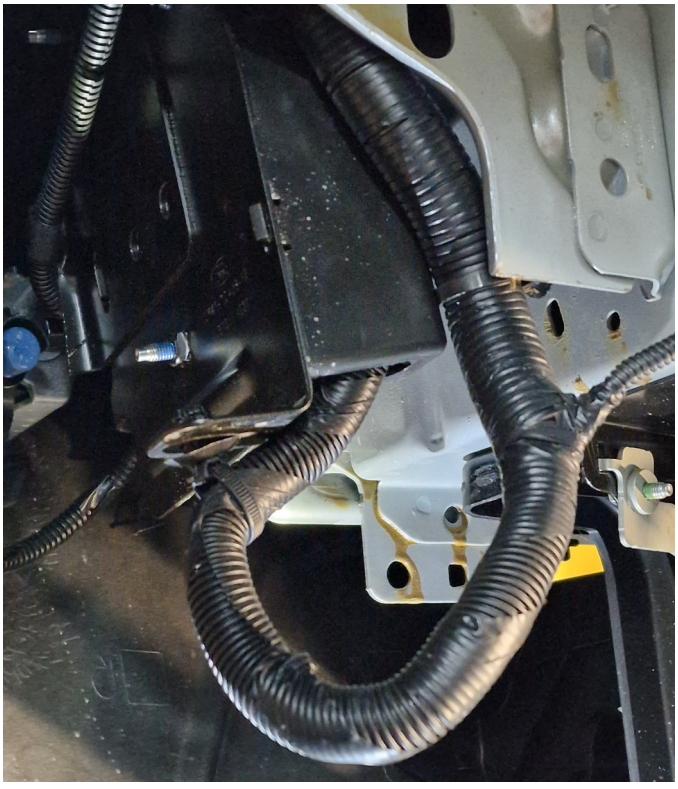


Remove the module with the bracket. The module will be placed behind the light module, as shown on the next page. The module isn't fixed with bolts so you need to drill away the metal plugs, **you only need to drill away the two plugs in the chassis. As shown above with a yellow arrow.**

MOUNTING THE FRONT - LEFT SIDE

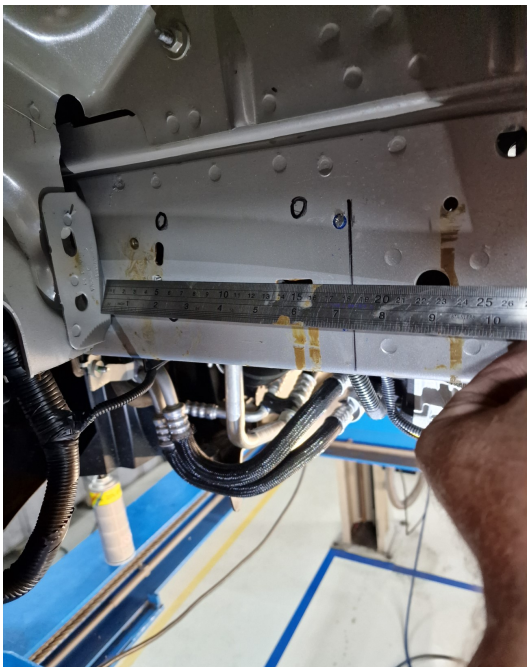


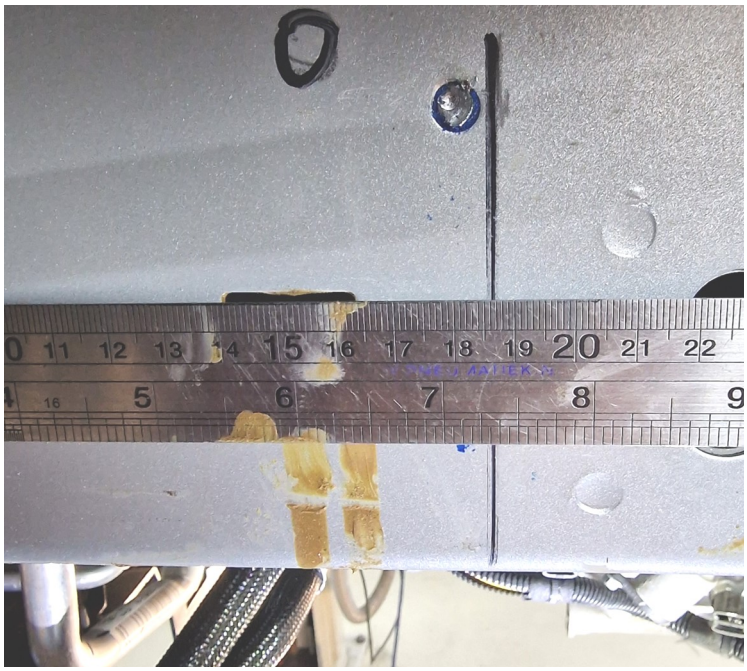
Remove the two bolts shown in the picture above. The top hole needs the be a slot to make the module with bracket fit. Adjust the hole and mount the module with the two original bolts.



Make sure the cables are fastened as well, use tie-wraps to make sure all the cables are placed sturdy and don’t hang loose.

MOUNTING THE FRONT - LEFT SIDE





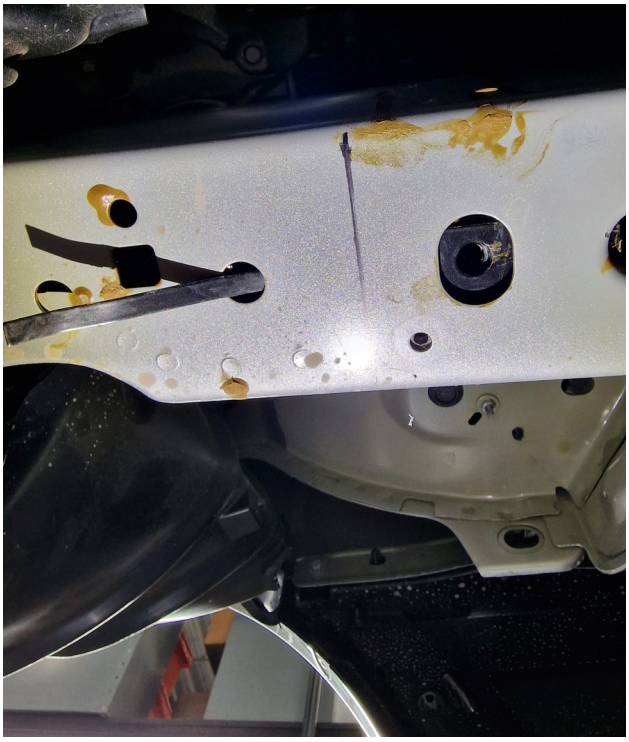
We will now start mounting the left mounting plate, this will be the same as the right side. Use a tape measure or a ruler. From the corner measure around 18,5cm / 7,28 inch, and place a straight line. Position the bracket on the line and make sure the mounting plate is firmly positioned against the bottom of the chassis. Mark the four mounting holes.

Make sure the mounting plate didn't shift during marking, you can check this by measuring the holes from the bottom of the chassis. Make sure they are on the same height measured from the bottom of the chassis.

Drill the 4 holes with a 12mm (31/64 inch) metal drill bit.

MOUNTING THE FRONT - LEFT SIDE

Before mounting the front mounting plate, there is a thread from the chassis that needs to be removed. Cut the thread as shown in the picture above, make sure to paint or use anti-corrosion filler so the blank metal won't rust.

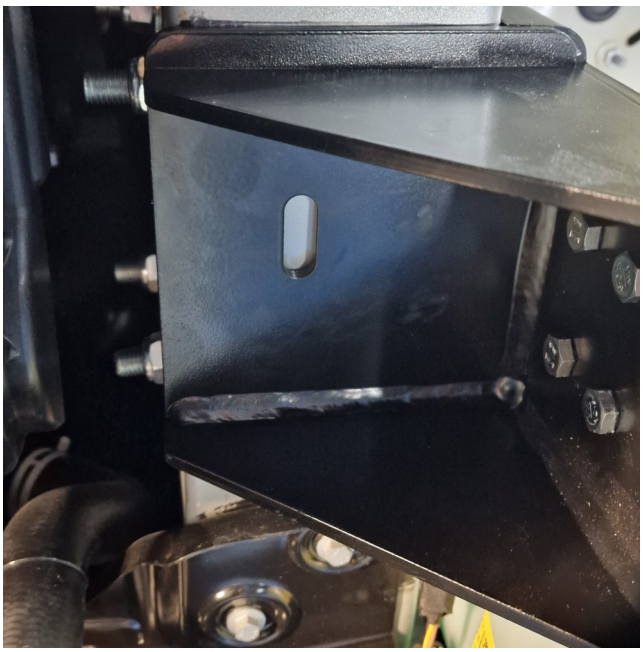


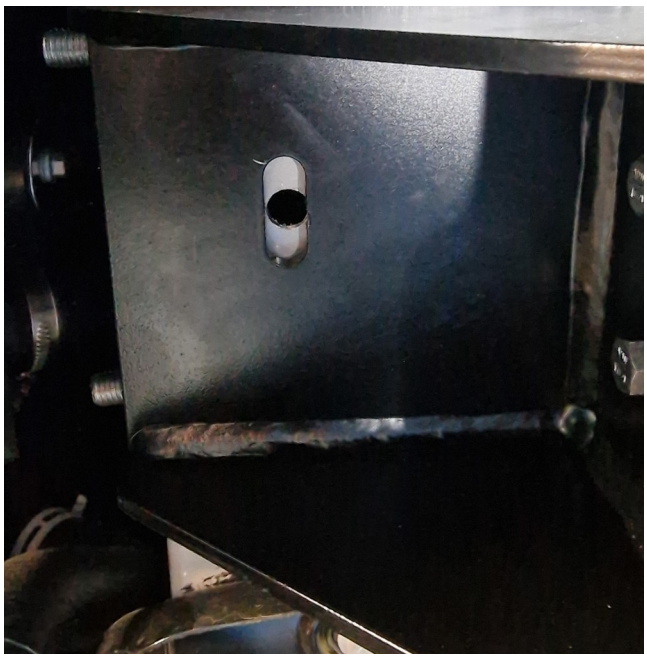
Before mounting the plate to the chassis, first place the **Mounting Plate - Bracket Font** in the chassis as shown in the picture above. Use the lager hole in the chassis to put the plate into it.

MOUNTING THE FRONT - LEFT SIDE

Some vehicles have a ground wire under the chassis, which can be in the way for mounting the jack. If this is the case relocate the ground wire, and make sure it has a good connection.

Before we can fix the mounting plate against the chassis. Make sure the jack is pre-assembled on the mounting plate, like we did on the right side. Use at least 12 M8 x 20 bolts per jack, make sure the bolts are divided over the whole jack. Make sure the hydraulic connections are facing the right way, see picture above. Fix the mounting plate on the chassis with the four M12 x 160 Bolts, M12 Rings and the M12 Locknut. Make sure the mounting plate is placed against the bottom of the chassis.

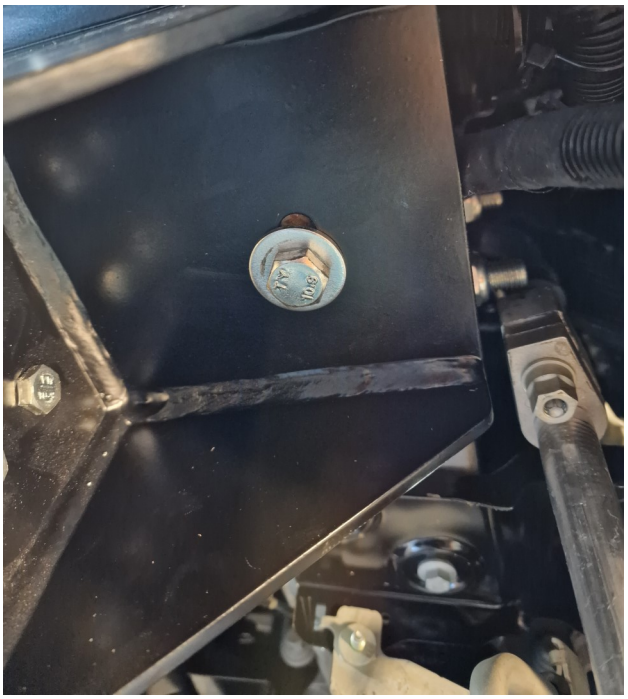




Now the bottom part needs to be secured on the chassis. Drill an 10mm (0,395 inch) hole in the bottom of the chassis.

MOUNTING THE FRONT - LEFT SIDE

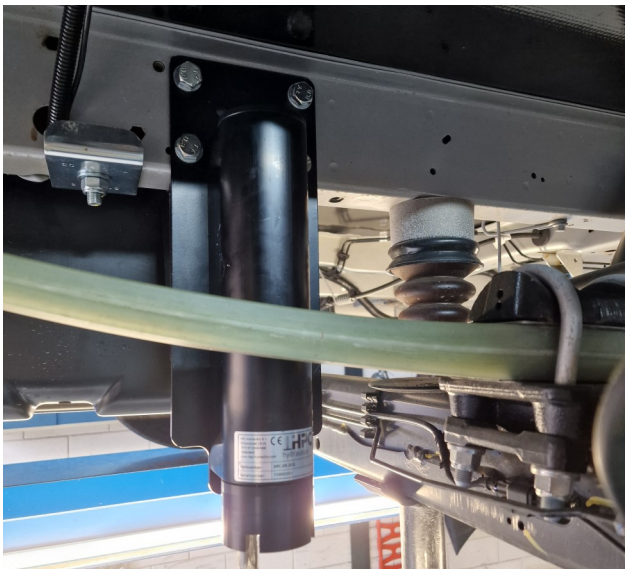
We will now use the **Mounting Plate - Bracket Font** we placed in the chassis to fix the bottom of the mounting plate to the chassis. Use the M10 x 30 Bolt together with the spring washer. If the bracket is not fully against the bottom of the chassis, loosen the 4 M12 locknuts and first tighten the bottom.



Make sure all the bolts and locknuts are tighten accordingly with the correct tightening moments.

The front right side is now finished. Place the protective cover back on the chassis, as well as the wheel arch cover. It is possible the protective cover needs to be adjusted, adjust it and make sure it will fit back on the chassis the correct way.

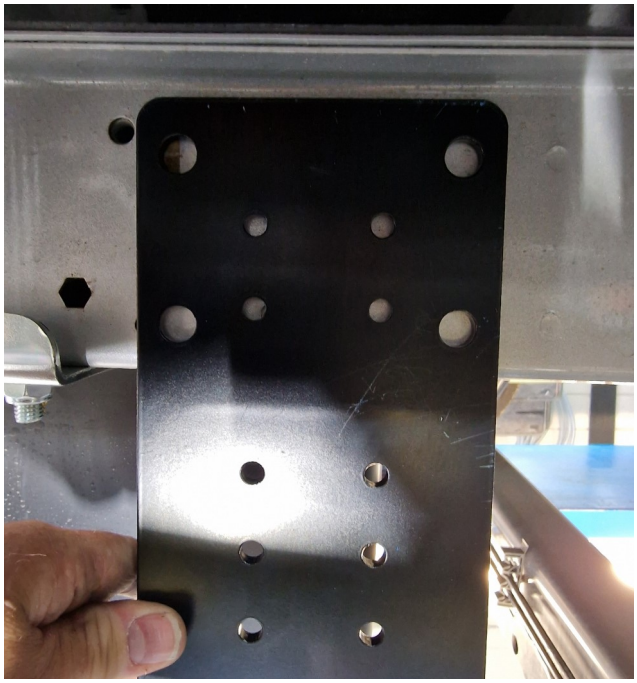
MOUNTING THE REAR



The rear jacks will be mounted close behind the wheels. The closer the jack can be placed to the wheel, the lower it can be installed without causing problems. We always advice a minimum height clearance to the floor of 15-17cm (6-7 inch).

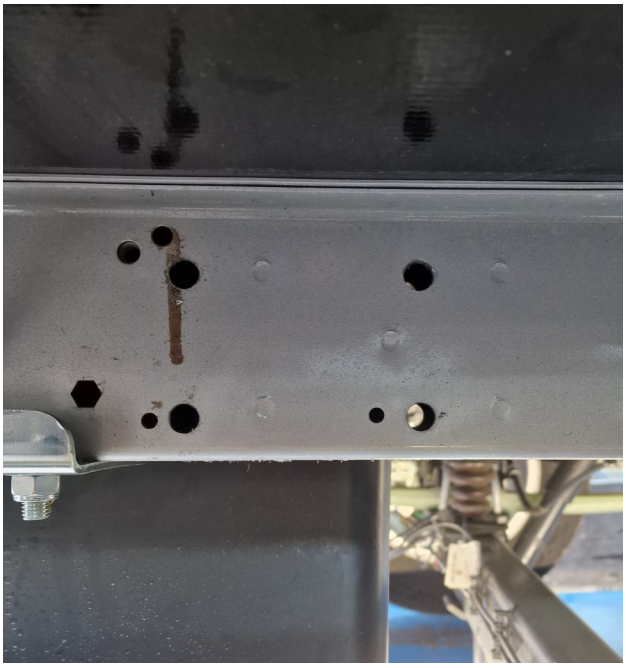
Keep in mind if the vehicle is loaded or not or if it has an air suspension system. Both affect the height clearance of the vehicle. Make sure to take both to considering when determining the height clearance.

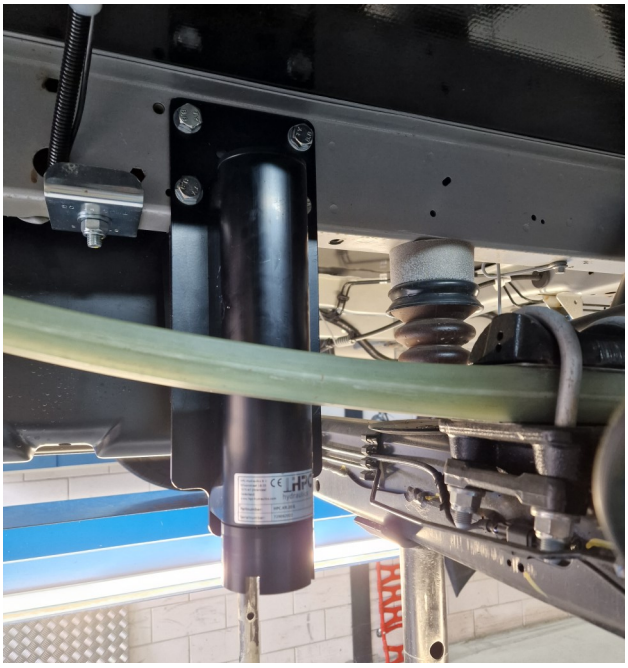
Before you can start mounting the rear mounting plates to the chassis, remove the wheels so it is easier to move and there is more space to work.



Place the mounting plate on a suitable spot, you can use the pictures above as a reference but it is possible the position needs to be slightly different. Mark the 4 holes of the mounting plate and drill the 4 holes with a 12mm (31/64 inch) metal drill bit.

MOUNTING THE REAR





Before we can fix the mounting plate against the chassis. Make sure the jack is pre-assembled on the mounting plate. Use at least 10 M8 x 20 bolts per jack, make sure the bolts are divided over the whole jack. There are four countersunk bolt and 6 hexagon bolt included. Make sure the hydraulic connections are facing the right way, depending on where the hydraulic motor is positioned.
Fix the mounting plate on the chassis with the four M12 x 100 Bolts, M12 Rings and the M12 Locknuts. Make sure the mounting plate is placed against the bottom of the chassis.

Do the same for the other side if you haven't already. Check if the hydraulic connections face the correct way and make sure all the bolts and nuts are tightened accordingly.

MOUNTING THE REAR—CROSS MOUNT

As mentioned in the main manual, if the jacks have more than 1/3rd below the chassis, there needs be a cross mount. For Ford a cross mount is neccesary, because it is impossible to have 2/3rd of the jack on the chassis height.

The cross mount should be mounted as low as possible on the mounting plates. The holes correspond with the holes in the jack and mounting plate. Some vehicles like the one in thes pictures have a tank below it. The tank ensures that the cross mount has to be placed lower than possible, so it needs a adjustment. In this case, a plate is welded on top that moves the cross mount down by a few cm (around one inch).

The mounting height of the cross mount is also effected by the distance the jack is mounted from the wheel. Make sure the cross mount isn't the lowest part of the car.

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