

Olson Kustom Works

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TBSS, 2014+ TRUCK KIT INSTRUCTIONS FOR 8 RIBS ON LSA BALANCER ONLY

Thank you for your purchase from OKW. If you have any questions about your products feel free to call or email! Copies in Color PDF format are available at our website, OKW-Inc.com under the product support.

This front drive system was designed with every aspect covered. Fitment, performance, and appearance have all been a high priority from conception to shipping! Please read this manual completely before starting this install. There are a few special tools needed, and you may have to borrow or rent them before disassembling your vehicle. Everything this kit uses is a factory removed or factory replacement part. Any wear item is available at any parts store. Some pictures are from the TRUCK kit, which varies slightly, but the general idea is the same. The only difference is the power steering pump.

OUR INSTRUCTIONS FOR OUR PRODUCTS ARE AVAILABLE IN COLOR AT OKW-INC.COM UNDER THE PRODUCT SUPPORT PAGE. PLEASE REFER TO THE INSTRUCTIONS ON THE PAGE AS THEY ARE THE MOST CURRENT REVISION.

Parts List:

- 1 Main Bracket
- 2 Additional Idlers Dayco PN 89052 or equivalent (For 8 rib kits use Continental 49111, not included)
- 2 M10x130mm Hex Bolt (Main bracket to block, Inboard Alternator)
- 2 M8x125mm Hex Bolt (Water Pump, recessed hole)
- 1 M10x80mm Hex Bolt (Outer Alternator)
- 2 M10x40mm Hex Bolt (Idlers)
- 5 M10 Washers
- 2 M8 Washers
- 2 Thick M10 or 3/8" Fender Washer (Idlers)
- 1 M10 Nyloc Nut
- 2 0.460" M10 Spacer (Idler Spacers, one is undercut)
- 1 3.935" M10 Spacer (Main Bracket to Block)
- 1 1.885" M10 Spacer (Alternator Inboard)
- 2 1.485" M8 Spacers (Water Pump)

All M10 Bolts will be torqued to 37 Ft Lbs, and all M8 Bolts will be torqued to 18 Ft Lbs AT THE END OF THE INSTRUCTIONS unless otherwise specified.

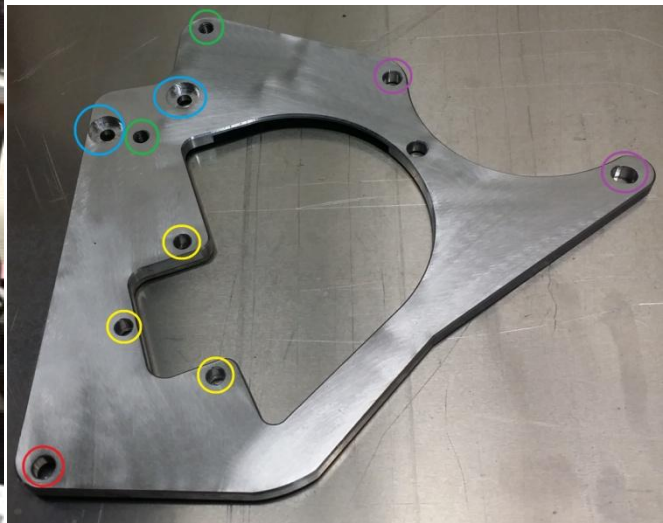
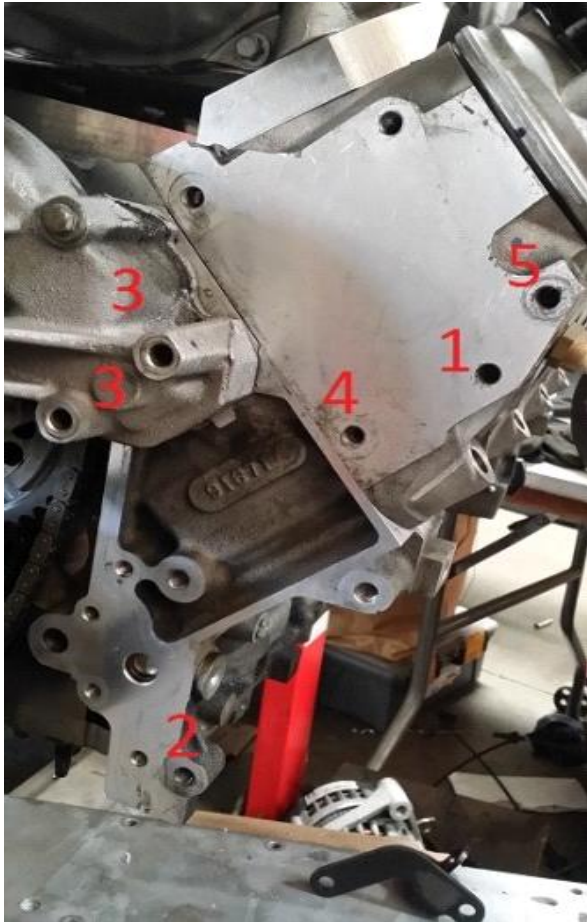
This kit was designed to only use one special tool, for the clutch fan. It is highly recommended to swap to an electric fan if possible. The power steering pulley can be left on the pump, as long as it has windows to access the bolts.

- Remove belt, fan assembly, and mechanical fan if equipped, along with the shroud if included.
- Remove alternator, upper idler pulley, and power steering pulley from pump if it doesn't have the windows. Any brackets or supports on the rear of the PS pump need to also be removed, on the TBSS they may not be there.



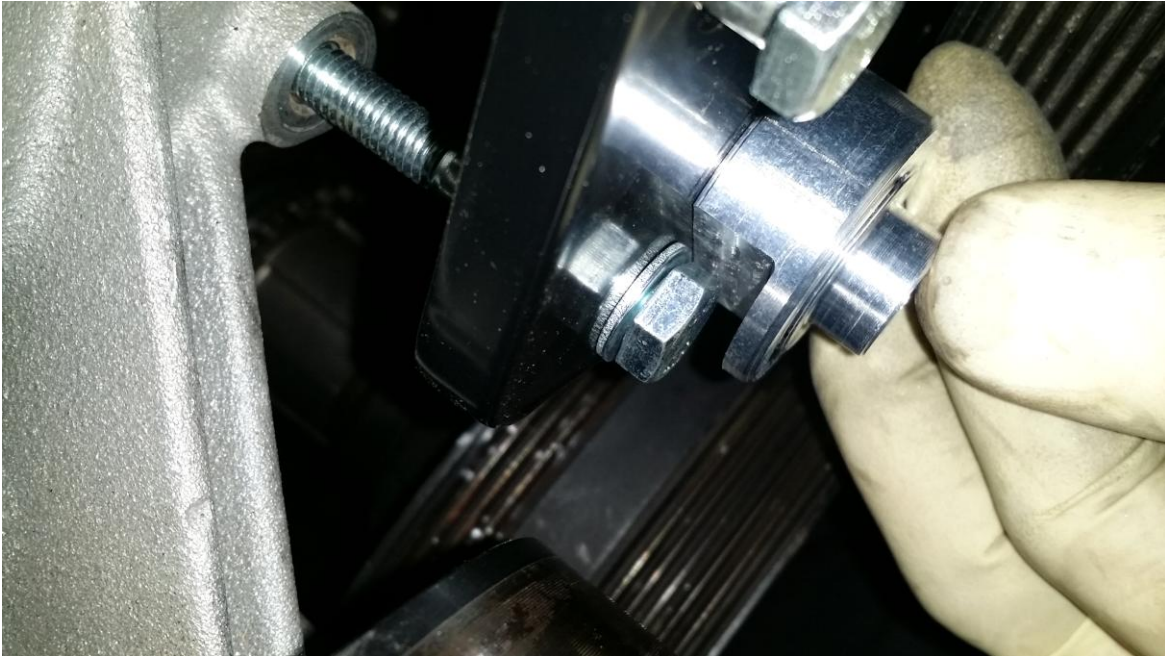
- BEFORE removing the PS pump from the bracket, you need to bend the lines slightly to clear the new locations. The high pressure line that points towards the alternator needs to be bent to point backwards, towards the block about 5 or 10 degrees. If this isn't done now, it's very hard to bend with the pump loose, and will cause the pump to not bolt into the new bracket, or you will need to remove the lines and bend them before reinstalling them in the pump.
- Remove the 3 bolts from the front of the power steering pump to the aluminum bracket (Marked 1), and the 2 nuts on the back holding the steel support bracket. Also remove the bolt going to the block on that same support bracket. This bracket will be reused later. (Arrows)
- Drain or vacuum out the power steering reservoir, and unhook the return and pressure feed lines from the pump. You will be removing it from the car.
- Using a small screwdriver or prybar, pry the lock tabs on the power steering reservoir clips up, and slide the locking tabs off the pump and reservoir (2 of them).
- Remove the reservoir assembly from the pump. Using the included reservoir and clips, reverse the process, making sure to install the O-ring on the reservoir.

- Remove the main aluminum front drive bracket using the 4 15mm bolts at the front (**Marked 2**). Some models have a jump start point on the side, this will just be zip tied out of the way at the end. There are 2 8mm or 10mm bolts holding it on.
- Remove the 2 lower drivers side water pump bolts (**Marked 3**), leaving the very top one in place. This is what you should be left with: (This was done on a mock up block, hopefully you have an oil pan and timing cover in place!!)



- In some versions of the bracket there are additional holes other than the ones listed in the picture above, disregard these. We try to minimize any waste products and some brackets fit multiple applications, or are mounting holes for the machining operations.
- See above for these next steps. All bolts will have a washer on them under the head.
- Take a 10x130mm bolt and place it through the RED hole on the bracket, with the 4.075" spacer, into hole 2 on the block. Snug these bolts but **DO NOT TIGHTEN COMPLETELY UNTIL THE END!**
- A 10x130mm bolt with the 2.025" spacer goes through the left PURPLE hole in the bracket, through the alternator, through the spacer, and into hole 5 on the head.
- The 8x125mm bolt with washers go through the right BLUE recessed hole, with a 1.625" spacer, then through the water pump bolt holes. Same for the 8x130mm bolt in the left BLUE hole (not recessed, even though it is on the picture above).
- The 10MMx80mm bolt with a washer goes through the outer PURPLE hole, through the alternator, and has a washer and Nyloc on the back side.

- Now, on the front of the bracket, rock the bracket back and forth to center it on the bolts, and torque all M10 bolts to 37 Ft Lbs, then tighten the 2 M8 water pump bolts to 18 Ft Lbs.
- Next we put the power steering pump back on the bracket in the YELLOW HOLES. Using the stock 8mm bolts removed before, tighten the pump to 22 lb ft. The pump should fit in through the front of the bracket without taking the pulley off, unless you had to remove it earlier.
- It will be easier to hook up the pressure hose with the pulley off, so do so now, as well as fit the return line onto the bottom of the reservoir.
- You can put the power steering pulley on at any time now if it was removed before.
- Install one of the idlers in the UPPER GREEN threaded hole with the .460" spacer using the 10MMx40mm bolt and large washer. Install the other idler with the other 40mm bolt and thick washer into the LOWER GREEN threaded hole. The undercut portion of the spacer goes over the 8mm bolt for the water pump. Both Idlers will be torqued to 37 Ft Lbs.



- Once your blower is installed, you need to measure for a belt. Belt routing is pictured below. The easiest way to measure is using wire or string. The part number of a belt is the key to getting the right one. There are 2 formats. The "K" is the belt profile, the 6 is the number of ribs, and the number after that is either the length in inches or CM. A 1010K6 is a 6 rib K belt 101.0 inches long. Same belt is also a 6PK2565. Dayco has a tool online to select a belt PN based on length. Most parts stores can reference this number to any other manufactured. Dayco Polycog and Goodyear are both good belts. Now for the measuring:
- Take a string or wire and wrap the pulleys following the picture below. Mark or cut the string/wire where they meet. Since belts are measured from the BACK of the belt, and you are measuring in the groove, this will give you the closest measurement. Leave the tensioner alone while measuring with the string, since it will throw off your measurement.

