

## Product Instructions

## #21-066 429-460 FORD MAIN SUPPORT

- 1) Unpack main support & check parts to make sure kit includes main support as well as 10 main bolts and 10 washers.
- 2) Lay main support on main caps. Install bolt & washer on #1 main cap below oil pump and on #5 main. Tighten snug only.
- 3) Install oil pump to check for interference. Most will require grinding right above the main bolt.
- 4) Remove oil pump and modify as needed.
- 5) Slowly turn crankshaft to check for interference between connecting rod bolts, rods, and the main support. Modify as needed. Will clear most stroke and rod combinations.
- 6) Install all main bolts & washers. Use the manufacturer's torque sequence with the following torque specs: Moly Lube: 40 ft. lbs., then 65 ft. lbs., final 85 ft. lbs.; 30W Oil: 50 ft. lbs., 85 ft. lbs., 105 ft. lbs.
- 7) Rotate crankshaft again to check for interference.
- 8) Install oil pump but do not fully tighten bolts.
  \*Note: If using #20-966 windage tray, install at this stage.
- 9) Remove the main bolt that corresponds with the pickup tube mounting tab. Attach pickup to oil pump and tighten flange bolts. Reinstall main bolt & washer through pickup mounting tab and tighten snug only. Torque oil pump mounting bolts to 35 ft. lbs. Retorque main bolt as listed in step #6.
- 10) Using a straight edge and a ruler, check pickup tube cup height from engine block surface. Lay gasket on oil pan and measure inside sump depth. Distance between pickup cup and pan bottom should be 3/8" to  $\frac{1}{2}$ ". Adjust pickup as needed.

Recommend: oil pan #15-770S, pickup #15-777, and #20-850 dipstick kit. Pans 13-766, 13-772, and 15-770S fit without modification. Pans 15-750, 15-760C, 15-770, 16-774, and 18-760 fit when scraper is removed. Pickups 15-777 is a direct bolt-on installation. Pickups 13-769, 15-771, 16-775, and 18-761 fit with slight bracket modification.

Use with stock pans is not recommended.