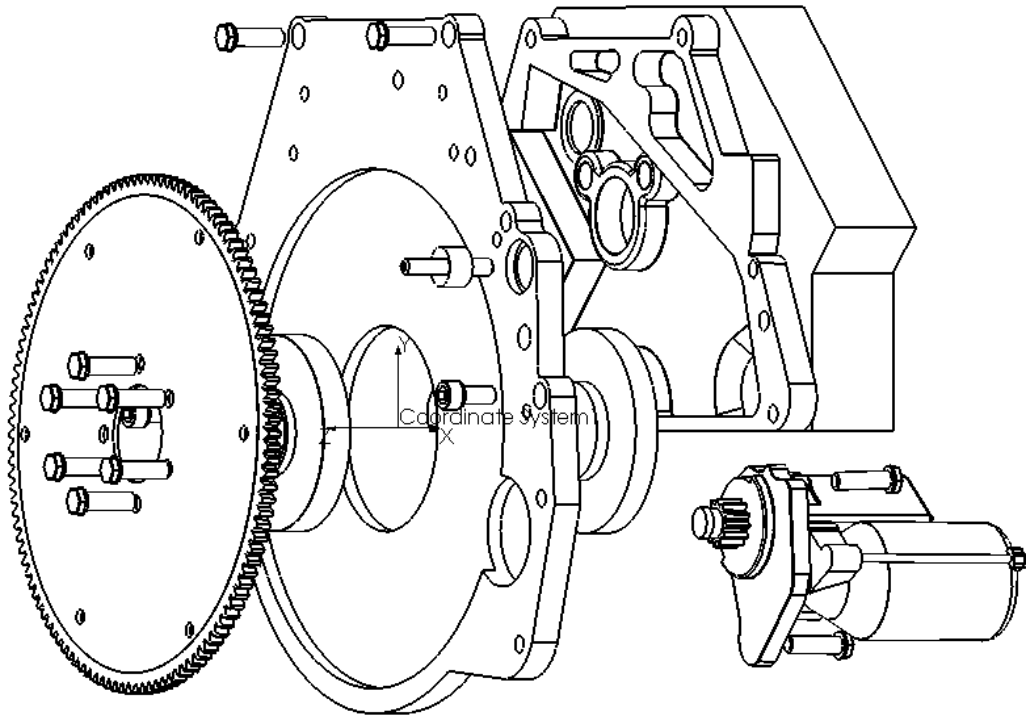


460-350 INSTRUCTIONS



IMPORTANT: THIS IS A HIGH PERFORMANCE PART AND IMPROPER INSTALLATION COULD RESULT IN INJURY OR DEATH! NEVER WORK UNDER AN AUTOMOBILE THAT IS NOT PROPERLY SUPPORTED AND BLOCKED FROM ROLLING. NO CREDIT OR REFUND WILL BE ISSUED FOR PARTS DAMAGED DUE TO IMPROPER INSTALLATION. REMEMBER THAT YOUR ADAPTER PLATE IS ALUMINUM AND NOT CAST IRON. DO NOT OVER-TORQUE THE FASTENERS. IF AT ANYTIME YOU HAVE ANY QUESTIONS ABOUT THIS INSTALLATION, CONTACT WILCAP OR YOUR WILCAP DEALER IMMEDIATELY. THE INSTALLATION AND USE OF THIS PRODUCT IS DONE AT YOUR OWN RISK!

YOUR ADAPTER IS SUPPLIED WITH A NEUTRAL BALANCE FLEXPLATE. IF YOUR ENGINE IS EXTERNALLY BALANCED, THE FLEXPLATE MUST BE MATCH-BALANCED TO YOUR ENGINE.

ADAPTER IS SUPPLIED WITH HARDWARE FOR THE CHEVROLET BOLT PATTERN. IF YOU ARE USING A BUICK, OLDS, PONTIAC PATTERN TRANSMISSION, CONTACT WILCAP FOR THE ADDITIONAL NEEDED HARDWARE.

YOUR WILCAP ADAPTER IS DESIGNED TO USE THE MOPAR SMALL BLOCK GEAR REDUCTION "MINI" STARTER OR ANY EQUIVALENT MOPAR

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460-350 INSTRUCTIONS

STARTER. THESE STARTERS ARE AVAILABLE FROM WILCAP OR YOUR LOCAL PARTS HOUSE SHOULD BE ABLE TO SUPPLY ONE USING THE FOLLOWING PART NUMBERS;

CHRYSLER P/N 53005984

NIPPONDENSO P/N 128000-781 OR 128000-7810

MOPAR PERFORMANCE P/N/ P5249644

POWERMASTER P/N 9300, 9512, OR 9613

TILTON P/N 273-36

AUTOLITE PRO P/N 17466

BECK ARNLEY P/N 187-0436

TYPICAL APPLICATION OF THE STARTER WOULD BE A 1992 DODGE DAKOTA WITH THE 5.2L ENGINE.

CHECK THAT ALL OF THE FOLLOWING PARTS ARE IN THE PACKAGE AND FREE OF DAMAGE;

1 CAST ALUMINUM ADAPTER PLATE

1 FLEX PLATE

1 ALUMINUM HUB SPACER

2 - SPECIAL OFFSET BOLTS

6 - 3/8" – 16 NUTS

4 – 3/8-16 DOUBLE ENDED STUDS

4 – 7/16 -14 X 1" UNC SOCKET HEAD CAP SCREWS

2 – 7/16 -14 X 1 3/4" UNC HEX HEAD CAP SCREWS & WASHERS

2 – 7/16 -14 X 1 1/4" UNC HEX HEAD CAP SCREWS & WASHERS

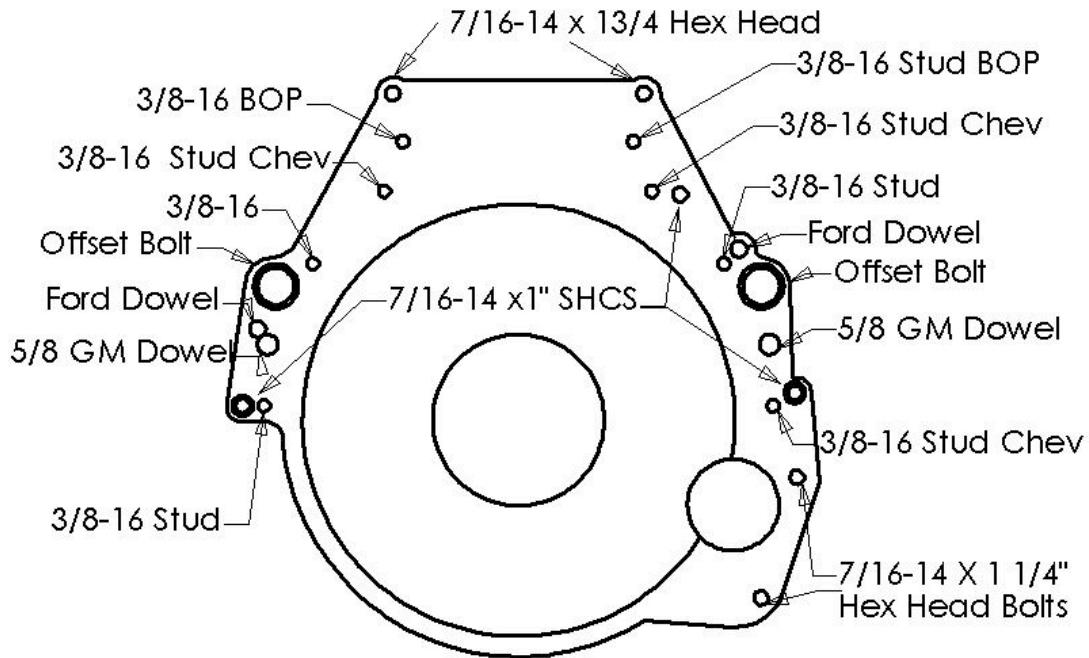
6 - 7/16- 20 x 1 1/2" BOLTS AND WASHERS

TORQUE VALUES

ADAPTER PLATE TO ENGINE	7/16-14 BOLTS 40-45 FTLBS
CRANK SHAFT BOLTS	75-80 FTLBS
BELLOUSING NUTS	30-40 FTLBS

ALWAYS USE OEM TORQUE VALUES WHEN AVAILABLE.

460-350 INSTRUCTIONS



460-350

1. CLEAN THE CRANKSHAFT FLANGE AND HUB USING SOLVENT AND A RAG AND INSPECT FOR BURRS, DINGS, NICKS, ETC. THIS IS CRITICAL! THE ALIGNMENT OF THE ENTIRE ROTATING ASSEMBLY RELIES ON THE FACE OF THE CRANKSHAFT AND THE HUB SPACER MATING EXACTLY. REMOVE ANY BURRS WITH A FINE PITCH FILE.

2. CLEAN AND INSPECT THE BLOCK MOUNTING SURFACE AND THE TRANSMISSION MOUNTING SURFACE AND REMOVE ANY BURRS. CHASE AND CLEAN ALL OF THE BLOCK TO BELL HOUSING BOLT HOLES AND REPAIR ANY DAMAGED THREADS.

3. INSTALL THE 2 SPECIAL OFFSET FASTENERS. SCREW THEM FLUSH WITH THE BLOCK USING THE 1/4" ALLEN SCREW. NOTE THAT THEY ARE MARKED "P" FOR PASSENGER SIDE AND "D" FOR DRIVERS SIDE

460-350 INSTRUCTIONS



4. PLACE THE ADAPTER PLATE ONTO THE ENGINE BLOCK. IF NECESSARY USE A RUBBER Mallet TO FIT THE PLATE UP TO THE BLOCK FLUSH. DO NOT USE THE CAP SCREWS TO FORCE THE PLATE ONTO THE BLOCK. IF THE PLATE WILL NOT SIT FLUSH TO THE BLOCK, CHECK THE DOWEL PINS ON THE BLOCK TO SEE IF THEY HAVE BEEN DAMAGED AND MAKE CERTAIN THE BLOCK PLUGS ARE NOT INTERFERING WITH THE ADAPTER PLATE.



**MAKE CERTAIN THAT
BLOCK PLUGS DON'T
INTERFERE WITH
ADAPTER PLATE
DURING INSTALLATION!**

5. ONCE THE ADAPTER PLATE IS FLUSH, ROTATE THE OFFSET FASTENERS TO LINE UP THE MARKS ON THE PLATE WITH THOSE ON THE FASTENERS.

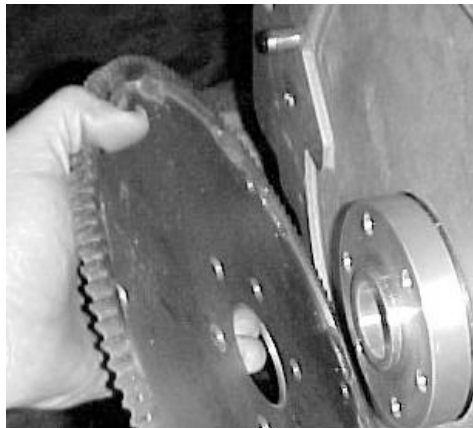
460-350 INSTRUCTIONS



6. MARK THE PLATE FOR ANY ADDITIONAL TRIMMING OR CUTTING FOR CLEARANCE. IF THE PLATE WILL BE TRIMMED, BE CAREFUL NOT TO CUT TOO CLOSE TO ANY OF THE FASTENER HOLES AND REMOVE ANY BURRS LEFT FROM CUTTING.

7. AFTER ANY CUTTING OR TRIMMING HAS BEEN COMPLETED, INSTALL THE CAP SCREWS AND THE SOCKET HEAD CAP SCREWS WITH THREAD LOCKING COMPOUND AND TORQUE IN A CRISS-CROSS PATTERN TO THE PROPER VALUES. AFTER TORQUING THE BOLTS, CHECK TO MAKE CERTAIN THAT NONE OF THE BOLTS PROTRUDE FROM THE SURFACE OF THE ADAPTER PLATE. IF NEEDED, TRIM THE BOLT HEADS OR SHANKS SO THAT THEY ARE FLUSH OR BELOW THE SURFACE OF THE ADAPTER PLATE.

8. THE RING GEAR IS OFFSET TO THE ENGINE SIDE OF THE FLEX PLATE. FROM THIS SIDE, FIT THE HUB SPACER INTO THE FLEX PLATE AND ALIGN THE CRANKSHAFT BOLT HOLES. THIS SHOULD BE A SNUG FIT. IMPORTANT! ANY TIME THAT ANY FORCE IS APPLIED TO THE HUB SPACER USE ONLY A RUBBER Mallet OR WOODEN DOWEL.

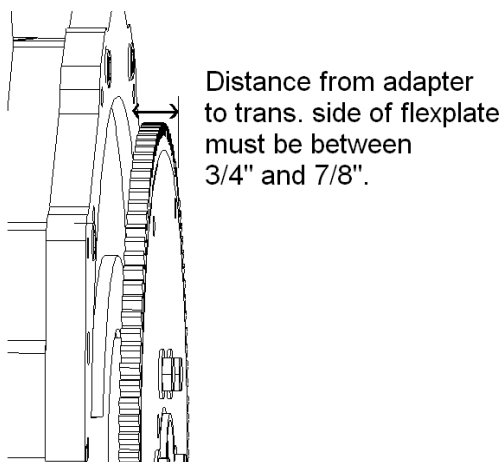


9. CAREFULLY ALIGN THE HUB SPACER/FLEX PLATE AND THE CRANKSHAFT BOLT HOLES WHILE PLACING THE HUB SPACER ONTO THE CRANKSHAFT. THE HUB SPACER SHOULD BE A CLOSE FIT TO THE

460-350 INSTRUCTIONS

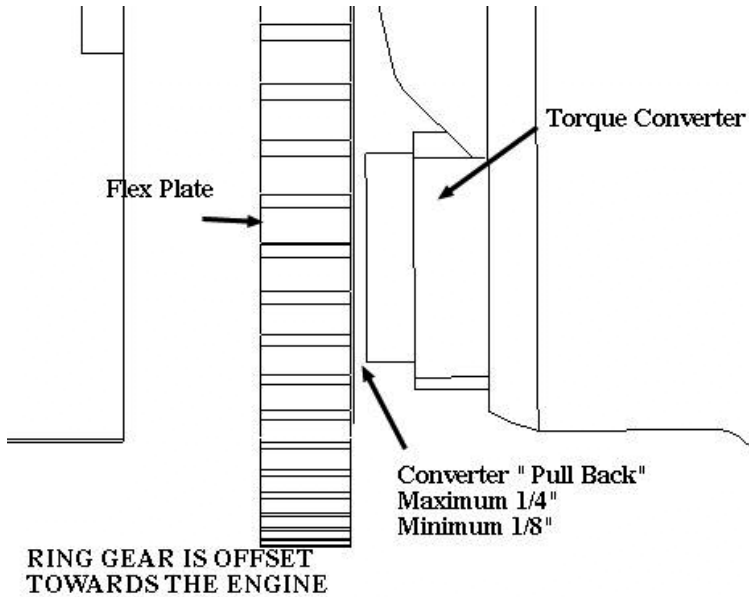
CRANKSHAFT. INSTALL THE CRANKSHAFT BOLTS WITH THREAD LOCKING COMPOUND AND TORQUE TO THE PROPER VALUE.

10. FIT UP THE STARTER MOTOR AND CHECK FOR PROPER RING GEAR TO PINION GEAR ENGAGEMENT. ADJUST IF NEEDED AND TORQUE STARTER BOLTS TO PROPER VALUE

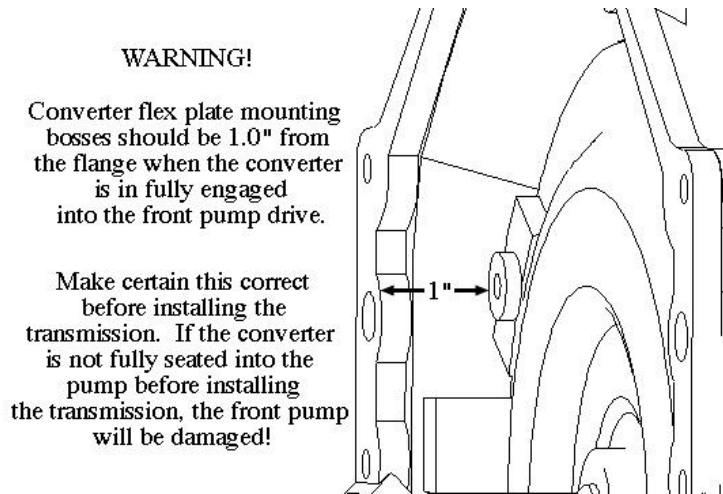


11. CHECK THE DISTANCE BETWEEN THE TRANSMISSION SIDE OF THE FLEXPLATE AND THE ADAPTER. THIS SHOULD BE BETWEEN .750" AND .875". **DO NOT PROCEED WITH THE INSTALLATION IF THIS IS NOT CORRECT.** ASSEMBLING THE MOTOR TO THE TRANSMISSION WITH THIS DIMENSION NOT IN TOLERANCE COULD RESULT IN TRANSMISSION OR STARTER DAMAGE. CONTACT WILCAP IF YOU FIND THIS DIMENSION TO BE GREATER THAN 7/8" OR LESS THAN 3/4".

460-350 INSTRUCTIONS



FIT UP THE STARTER MOTOR AND CHECK FOR PROPER RING GEAR TO PINION GEAR ENGAGEMENT. THE PINION GEAR OF THE STARTER SHOULD TRAVEL $\frac{1}{2}$ TO $\frac{2}{3}$ ACROSS THE FACE OF THE RING GEAR WHEN THE SOLENOID IS ACTUATED. PROPER ALIGNMENT OF THE STARTER TO RING GEAR IS OBTAINED WHEN THE REGISTER ON THE FRONT OF THE STARTER IS MATED TO THE OUTSIDE EDGE OF THE STARTER HOLE. TORQUE STARTER BOLTS TO PROPER VALUE.



CHECK THAT THE CONVERTER IS SEATED INTO THE FRONT PUMP PRIOR TO INSTALLING THE TRANSMISSION. CHECK THE "PULLBACK" DISTANCE

460-350 INSTRUCTIONS

OF THE CONVERTER PRIOR TO INSTALLING THE CONVERTER TO FLEX PLATE BOLTS.

12. WHILE INSTALLING THE TRANSMISSION, REMEMBER THAT THE DOWEL PINS ARE FOR ALIGNMENT ONLY AND WILL NOT BEAR THE WEIGHT OF THE TRANSMISSION. IF THE ENTIRE WEIGHT OF THE TRANSMISSION IS PUT ONTO THE DOWELS THEY WILL BE PULLED FROM THE ADAPTER PLATE.

13. USING THE PROVIDED ACCESS HOLE ALIGN THE CONVERTER AND THE FLEXPLATE HOLES AND START EACH BOLT. ROTATE THE ENGINE AS YOU TORQUE THE CONVERTER BOLTS TO THEIR FINAL VALUE IN AT LEAST THREE STEPS.

14. YOUR BELL HOUSING TO ADAPTER PLATE STUDS SHOULD GO INTO THE ADAPTER PLATE A MINIMUM OF 1/2". YOUR BELL HOUSING BOLTS SHOULD ALLOW FOR 1/2" OF THREAD INTO THE ADAPTER PLATE. ALSO CHECK THAT THE BOLTS DO NOT REACH PAST THE ADAPTER PLATE AND HIT THE BLOCK. USE THREAD LOCKING COMPOUND ON THE ADAPTER TO BELL HOUSING BOLTS.

DO NOT HESITATE TO CONTACT US WITH ANY PROBLEMS, IDEAS OR SUGGESTION TO MAKE THIS PRODUCT BETTER. THANKS AGAIN FOR YOU BUSINESS.