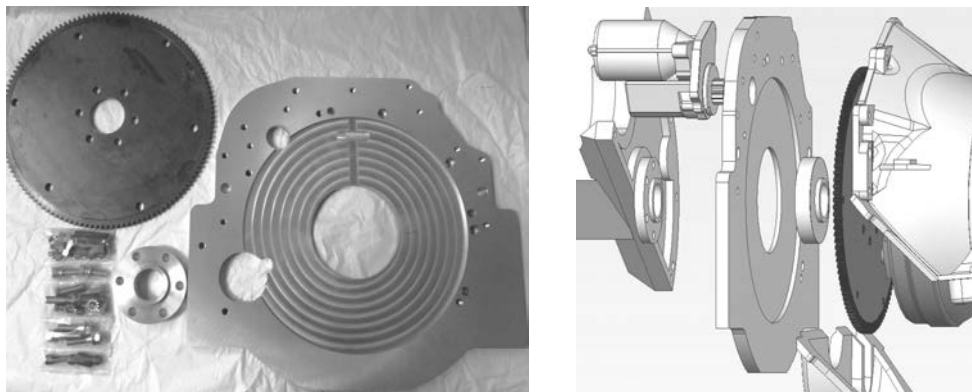


225-350 AT ADAPTER INSTALLATION INSTRUCTIONS



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. DO NOT OVERTORQUE THE FASTENERS. IF AT ANYTIME YOU HAVE ANY QUESTIONS ABOUT THIS INSTALLATION, CONTACT WILCAP IMMEDIATELY. THE INSTALLATION AND USE OF THIS PRODUCT IS DONE AT YOUR OWN RISK.

YOUR WILCAP ADAPTER IS DESIGNED TO USE A MODIFIED MOPAR SMALL BLOCK GEAR REDUCTION "MINI" STARTER OR ANY EQUIVALENT MOPAR 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 54-10000

AUTOLITE PRO P/N 17466

BECK ARNLEY P/N 187-0436

UNPACK AND CHECK FOR SHIPPING DAMAGE PRIOR TO BEGINNING THE INSTALLATION. PACKAGE SHOULD INCLUDE;

1 ALUMINUM ADAPTER PLATE

1 CRANKSHAFT HUB SPACER

1 FLEX PLATE

FASTENERS;

3 3/8 16 X 1" SOCKET HEAD CAP SCREWS

3 7/16 14 X 1 3/4" HEX HEAD CAP SCREW W/WASHERS

6 7/16 20 X 1 1/2" GRADE 8 HEX HEAD CRANKSHAFT BOLTS W/ EXT. TH. LK. WASHERS

2 7/16 14 X 1 1/4" BOLT W/WASHER FOR STARTER

7 3/8-16 X 2 1/8" DOUBLE ENDED STUDS W/ WASHER AND NUT

225-350 AT ADAPTER INSTALLATION INSTRUCTIONS

ADAPTER PLATE TO ENGINE	3/8-16 SHCS 35-40 FT. LBS. 7/16-14 HEX HEAD BOLTS 45-50 FT. LBS.
CRANK SHAFT BOLTS	55 FT. LBS.
BELLHOUSING NUTS	30-40 FT. LBS.

1. CLEAN THE CRANKSHAFT HUB, BACK OF THE BLOCK, FRONT OF THE TRANSMISSION BELL HOUSING AND THE TORQUE CONVERTER HUB OR NOSE. INSPECT FOR CRACKS AND BURRS AND REPAIR AS NEEDED. CHASE ALL HOLES IN THE BLOCK WITH THE CORRECT TAP AND MAKE CERTAIN THE THREADS ARE SERVICEABLE. CHECK YOUR DOWEL PINS TO SEE THAT THEY ARE IN GOOD CONDITION AND NOT “MUSHROOMED”. REPLACE IF NEEDED.

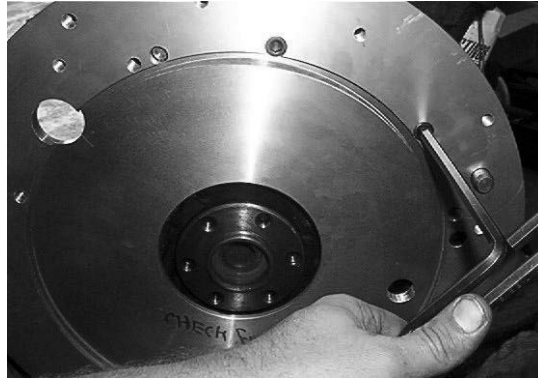
2. CHECK THAT THE HUB SPACER SLIPS OVER YOUR TORQUE CONVERTER HUB. IF THERE IS EXCESSIVE CLEARANCE, STOP. CONTACT WILCAP BEFORE PROCEEDING. OPERATING THE ENGINE WITH EXCESSIVE CLEARANCE BETWEEN THE HUB SPACER AND THE NOSE OF THE TORQUE CONVERTER WILL RESULT IN DAMAGE TO THE FLEX PLATE AND THE TRANSMISSION.

3. 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.



225-350 AT ADAPTER INSTALLATION INSTRUCTIONS

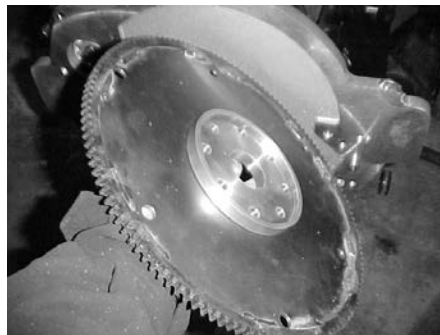
4. USING THE SUPPLIED 7/16-14 AND THE 3/18-16 BOLTS BOLT THE ADAPTER PLATE TO THE BLOCK. IF NECESSARY USE A RUBBER Mallet TO FIT THE PLATE UP TO THE BLOCK FLUSH. DO NOT USE THE CAP SCREWS TO FORCE THE PLATE ONTO THE BLOCK. CHECK FOR FIT. THE PLATE SHOULD FIT FLAT THE PLATE SHOULD FIT FLAT TO THE ENGINE BLOCK WITH NO ROCKING OR GAP.



5. ONCE THE ADAPTER PLATE IS FLUSH, MARK THE PLATE FOR ANY 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.

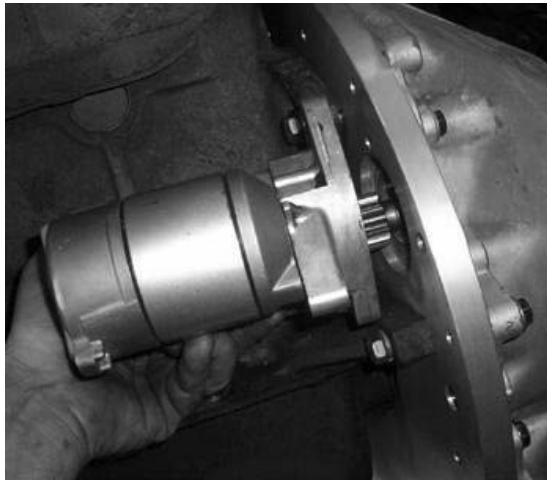
6. AFTER ANY CUTTING OR TRIMMING HAS BEEN COMPLETED, INSTALL THE SOCKET HEAD CAP SCREWS WITH THREAD LOCKING COMPOUND AND TORQUE THE BOLTS, CHECK TO MAKE CERTAIN THAT NONE OF THE BOLTS PROTRUDE FROM THE SURFACE OF THE ADAPTER PLATE. IF NEEDED, TRIM THE BOLT HEADS OR SHANKS SO THAT THEY ARE FLUSH OR BELOW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

7. **THE RING GEAR IS OFFSET TO THE ENGINE 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.**



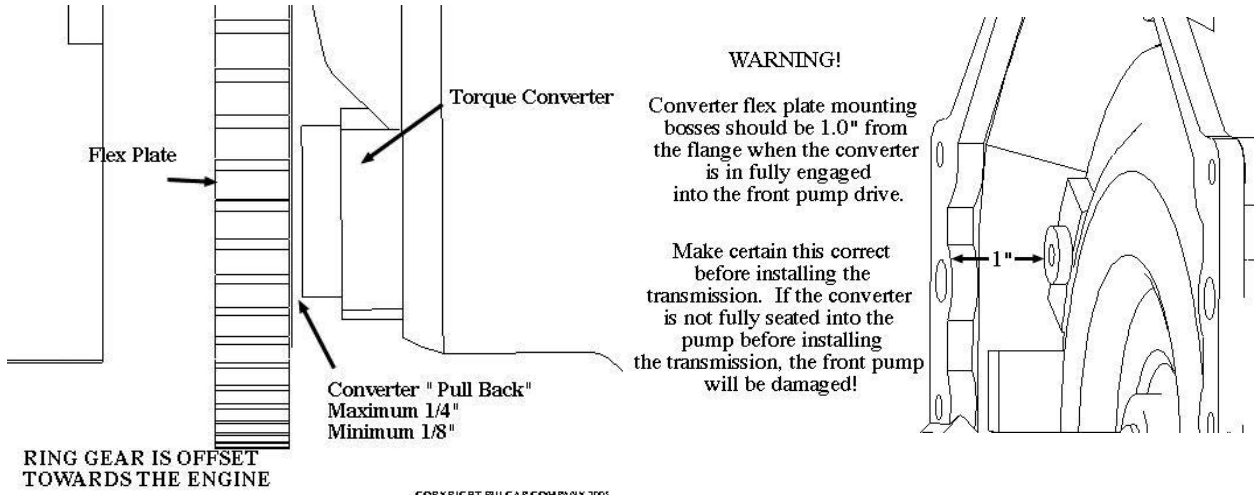
225-350 AT ADAPTER INSTALLATION INSTRUCTIONS

8. 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 CRANKSHAFT. INSTALL THE CRANKSHAFT BOLTS AND TORQUE TO THE PROPER VALUE.
9. WHILE INSTALLING THE TRANSMISSION, REMEMBER THAT THE DOWEL PINS ARE FOR ALIGNMENT ONLY AND THE DOWEL PINS WILL NOT BEAR THE WEIGHT OF THE TRANSMISSION. USE A TRANSMISSION JACK AND MAKE CERTAIN THAT THE CONVERTER IS SEATED INTO THE FRONT PUMP FULLY. LUBRICATE THE PILOT OF THE TORQUE CONVERTER WITH A SMALL AMOUNT OF GREASE. ONCE THE TRANSMISSION IS IN PLACE, ALIGN THE CONVERTER BOLT HOLES AND THE FLEX PLATE HOLES, PULL THE TORQUE CONVERTER FORWARD TO THE FLEX PLATE AND INSTALL THE CONVERTER TO FLEX PLATE BOLTS.
10. CHECK THAT THE PINION GEAR DOES NOT HIT THE TRANSMISSION CASE. IF IT DOES, IT MAY BE NECESSARY TO GRIND A SMALL AMOUNT OF MATERIAL AWAY ON THE INSIDE OF THE TRANSMISSION CASE. AFTER MARKING IT, USE A DIE GRINDER OR A ROTARY FILE AND GRIND AWAY THE NEEDED AMOUNT THROUGH THE STARTER PINION HOLE.
11. 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.



12. CHECK THAT THE CONVERTER IS SEATED INTO THE FRONT PUMP PRIOR TO INSTALLING THE TRANSMISSION. CHECK THE “PULLBACK” DISTANCE OF THE CONVERTER PRIOR TO INSTALLING THE CONVERTER TO FLEXPLATE BOLTS.

225-350 AT ADAPTER INSTALLATION INSTRUCTIONS



MODIFICATION OF MOPAR-TYPE STARTER



STARTER APPLICATION; DODGE TRUCKS, SUVS 1991-1995 3.9, 5.2, 5.9L ENGINES LESTER #17466 REPLACES 128000-781
 EXAMPLE; 1992 DODGE DAKOTA W/318 C.I.
 BECAUSE OF CLEARANCE, FOR YOUR APPLICATION YOU MUST MODIFY THE STARTER. THE "NOSE" OF THE STARTER MUST BE REMOVED. THIS REQUIRES THE USE OF A LATHE, BANDSAW, OR HACK SAW. MOST ANY MACHINE SHOP CAN PERFORM THIS OPERATION SAFELY AT A REASONABLE COST. WILCAP ALSO HAS THE MODIFIED STARTER AVAILABLE.

