



## HEAD CLEARANCE WARNING

### ( ONLY IF YOU ARE ASSEMBLING YOUR OWN MOTOR )

- 1.) SOME TORQUE MASTER CRANKCASES HAVE BEEN ALTERED IN ORDER TO ACHIEVE PROPER BEARING FIT. THE CASE CHANGES ARE NO PROBLEM WITH THE STOCK (OEM HEAD). IF YOU HAVE AN AFTER MARKET HEAD, PLEASE CALL THE HEAD BUILDER AND ASK THEM THE MINIMUM ALLOWABLE SQUISH CLEARANCE.
- 2.) PERFORM A SQUISH TEST ON YOUR SLED. THIS REQUIRES (2) PIECES OF ROSIN CORE SOLDER (NOT ACID CORE AND NOT SOLID SOLDER) AND MUST BE THICKER THAN .070 TO GET AN ACCURATE CHECK.
- 3.) BEND BOTH PIECES INTO AN (L) SHAPE SO THEY CAN GET DOWN THROUGH THE PLUG HOLE AND ALL THE WAY OVER TO TOUCH THE SIDE OF THE CYLINDER. TWO PIECES MUST BE USED SO THE PISTON DOES NOT LEAN AND GIVE A FALSE WITH THE WRIST PIN SO IT IS DIRECTLY ABOVE THE PIN. THEN TURN OFF THE KEY AND KILL SWITCH AND ROLL TWARNING.
- 4.) LINE THE SOLDER UP EVEN HE MOTOR OVER VERY SLOWLY USING THE CLUTCH UNTIL YOU FEEL IT HIT THE SOLDER. TURN IT FIRMLY UNTIL IT PASSES THE SOLDER AND MARK THOSE (2) PIECES WITH DUCK TAPE AS TO WHICH CYLINDER THEY ARE.
- 5.) YOUR HEAD SUPPLIER WILL NEED MEASUREMENTS FROM THESE SOLDER PIECES WHEN YOU CALL THEM SO HAVE THEM READY AS WELL AS A DIAL CALIPER.
- 6.) RULE OF THUMB - A MINIMUM OF .060 SQUISH CLEARANCE IS A SAFE PARAMETER. ANY LESS THAN .060 PLEASE CALL THE SHOP. SOME AFTER MARKET HEADS WILL PUSH THESES CLEARANCES TO A VERY CLOSE DISTANCE WHICH MEANS !!!! THE CRANKCASE HAS BEEN CUT AND LINE BORED AND THE HEAD WILL BE TIGHT AND IT MAY CAUSE DETONATION.

**ANOTHER NOTE:** IF YOU CHOOSE THE CYLINDER EXCHANGE PROGRAM, YOU SHOULD ALWAYS TAKE A SQUISH CHECK TO VERIFY THAT YOU HAVE THE CORRECT CYLINDER.

THANK YOU FOR CHOOSING **INDY SPECIALTY** FOR ALL YOUR POLARIS MOTOR NEEDS.

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