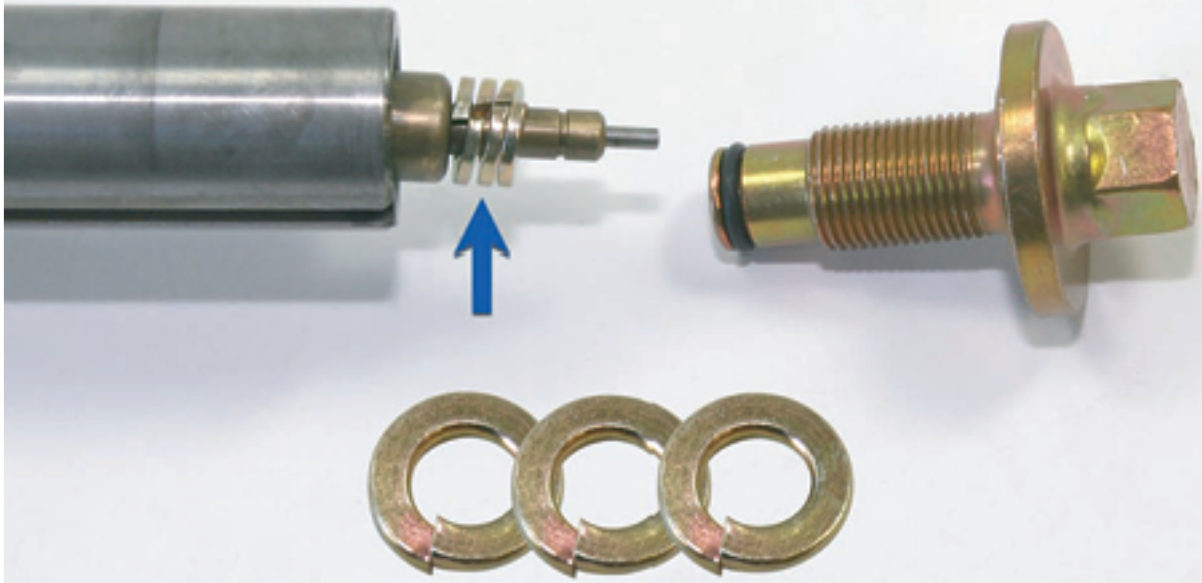
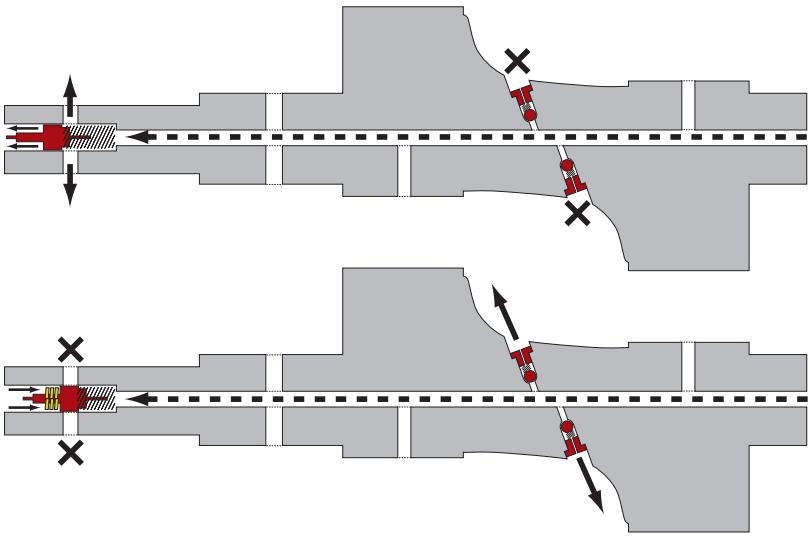
PINEAPPLE RACING.com
PERFORMANCE ENGINES AND PARTS

THERMAL BYPASS ELIMINATION KIT

(THREE 5/16 INCH LOCK WASHERS)



Note: this modification is intended to be performed in the course of an engine rebuild, with the engine mounted so that the pulley bolt is facing up. Performing the modification with the engine in the horizontal position, as mounted in the car, requires special measures be taken to prevent slippage of the thrust bearings when end-play tension is released. As with any modification, proceed at your own risk. We cannot be responsible for work performed by others, regardless of whether the directions were followed or not.



With the thermal bypass valve open, the oil pressure in the eccentric shaft is insufficient to open the rotor-cooling oil squirter check balls. By using three 5/16 inch lock washers, the valve can be forced closed under all conditions, permitting the flow of oil to the rotors.

Beginning in 1986 and continuing right through the RX-8, Mazda implemented a rapid warm-up emissions device known as the eccentric shaft thermal bypass valve. When the engine is cold, the valve bleeds off oil pressure in the eccentric shaft, which causes the oil squirters that cool the rotors to shut off. When the valve works properly, it is pretty harmless, but if it fails (and it always fails in the open position) the rotors will overheat and cause damage to the engine. The thermal bypass can be defeated by placing three 5/16 inch lock washers over the end of the valve. We recommend doing this on every rebuild because a failure has grave consequences. At least one company sells a fancy aluminum device that accomplishes the same thing, but why spend 100x more when a few pennies worth of lock washers does the job just as well? Put your hard earned money elsewhere.

12838-B NE Airport Way, Portland, Oregon 97230 • 503-233-3878