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WEAR GAUGE FOR FUELING ADAPTERS

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THIS GAUGE TESTS FUELING ADAPTERS FOR EXCESSIVE WEAR IN LESS THAN 1 MINUTE

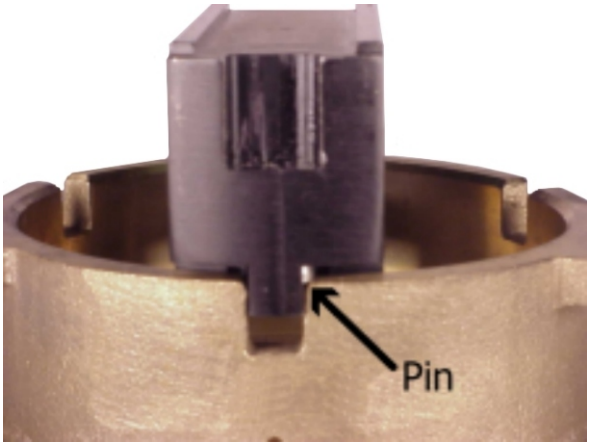
Shown here actual size

Leakage during refueling is often caused by excessive wear on the underside of the 3 lugs that are located on the outer edge of the fueling adapter. This wear reduces the sealing force between the nose seal of the refueling nozzle and the sealing face on the adapter.

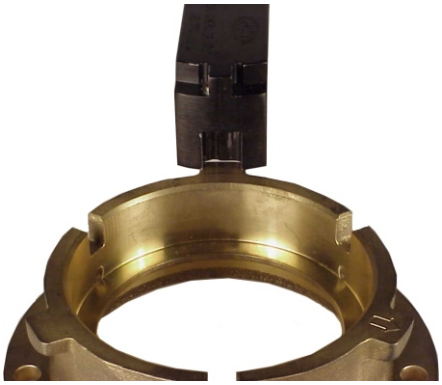
To check for lug wear, set the gauge in the adapter and rotate it so that the gauging pin moves toward the lug. If the pin passes under the lug, wear is excessive.

Failure of the interlock system can result in a major fuel spill because the nozzle could be disconnected from the fueling adapter before the nozzle valve has been closed. Excessive wear (0.062 inches) of the alignment slots of the adapter on the counter-clockwise side is the limit.

To check for this wear, invert the gauge and set it on the adapter with the tongue in a slot. If the small pin completely enters the slot, there is excessive wear.



Lug width is important because excessive wear can result in a fuel spill in the same way as described for slot wear.



To check for lug width wear, use the groove in the end of the gauge. If the lug enters the groove, there is excessive wear.

There are two consequences of excessively worn refueling adapters:

1. Leakage when the nozzle is attached.
2. A major spill if the nozzle is accidentally removed from the adapter while the nozzle valve is still in the open position.

Wear that develops on the underside of the three lugs is the most common problem. It causes leakage because it reduces the force on the seal between the nozzle and adapter. Our GTP-8963 wear gauge quickly determines whether the lugs are excessively worn. Each lug should be checked. If any of the three are overly worn, the adapter must be replaced.

The most dangerous adapter condition is wear that can allow the nozzle to be removed before the valve is closed. This wear occurs in the three slots, about ¼ inch (6.4 mm) wide, which are located between the lugs. When a nozzle is being attached to an adapter, the operator rotates the nozzle clockwise until it stops. This causes the nozzle pins to impact the clockwise side of each slot, causing wear. However, this wear is of no consequence. But when the nozzle is removed, the impact and wear occurs on the counter-clockwise side of the slots. This is the dangerous wear that our gauge measures.