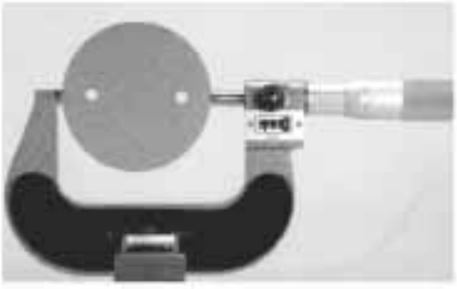
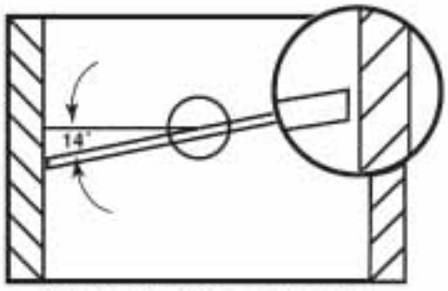
THROTTLE PLATES

IMPORTANT FACTS





Cutaway of throttle plate

QUALITY MACHINING:

EACH KINSLER THROTTLE PLATE IS LATHE TURNED!!!

NOT stamped - a stamped plate can be bowed from the press, have rough edges, not have the correct edge angle, etc. Turning gives a flat, crisp edge, at the precise angle.

KINSLER PLATE'S GIVE YOU THE QUALITY YOUR PROJECT DESERVES!

REPLACEMENT THROTTLE PLATE:

We STOCK and CUSTOM make plates for all types of injection manifolds and throttle bodies:

HILBORN, ENDERLE, CROWER,

JACKSON, ALGON, RON'S, EVM,

CUSTOM THROTTLE PLATES:

We make plates for just about ANYTHING! Injection units, carbs, throttle bodies, etc. We have spinning fixtures for different angles and bolt hole spacings. Talk to us about quoting your *special job!*

DIAMETER:

The diameter is measured across the center of the bolt holes. The diameter must be smaller than the throttle bore to provide clearance for rotation. The clearance between the plate and the throttle bore will vary depending on:

A) Type of throttle shaft – milled or slotted.

B) Quantity of plates over a length of shaft.
Example: One-piece throttle shaft with four plates versus two shafts with two plates, joined with a Billet Spring-Screw Link, see Page19-M.

BOLT HOLES:

The center to center of the retaining bolts vary due to the physical size of the plate, ease of alignment, and mounting of the plate to the throttle shaft. Throttle plate screw holes that are larger than the screw diameter allow the plate to be adjusted for alignment and fit to the throttle bore.

CAUTION: An air leak can be caused if the holes in the throttle plate are exposed.

MATERIAL:

Our standard plate material is 2024 aluminum. This alloy has very high bending strength. We also offer on special order 304 stainless steel (.091" thick ONLY). We do not recommend using brass (too soft) or cold finished steel (rusts, and creates excessive wear on throttle bore).

THICKNESS:

We use .062", .071", and .091" depending on the throttle bore size and the strength that is required. Do not use a plate that is thicker than needed. The thicker the plate the greater the air restriction and turbulence around it.

ANGLE:

Our standard closed throttle angle is 14°...rotating 76° to wide open. Our experience is that this angle is a good balance between total degrees of rotation and non-sticking. Special angles are available on request.

STREAMLINED:

This gives the plate an aerodynamic shape. The plate has the leading and trailing edge thinned, then tapered and blended to the original thickness where the plate mounts on the throttle shaft. Best results are achieved when used in conjunction with streamlined throttle shafts, (See Page 26-M).

ALUMINUM THROTTLE PLATES NORMALLY STOCKED:

ACTUAL DIAMETER	CENTER TO CENTER ON SCREW HOLES	NOMINAL THICKNESS
1.372"	1.0"	.062"
1.523"	1.0"	.062"
1.697"	1.0"	.062"
1.807"	1.0"	.062"
1.872"	1.0"	.062"
1.897"	1.0"	.062"
1.997"	1.0"	.062"
2.147"	1.0"	.071"
2.179"	1.5"	.071"
2.182"	1.5"	.071"
2.242"	1.5"	.071"
2.245"	1.5"	.071"
2.247"	1.5"	.071"
2.297"	1.0"	.071"
2.362"	1.5"	.071"
2.365"	1.5"	.071"
2.367"	1.5"	.071"
2.429"	1.5"	.071"
2.432"	1.5"	.071"
2.434"	1.5"	.071"
2.492"	1.5"	.071"
2.495"	1.5"	.071"
2.497"	1.5"	.071"
2.554"	1.5"	.071"
2.557"	1.5"	.071"
2.617"	1.5"	.071"
2.620"	1.5"	.071"
2.670"	1.5"	.071"
2.672"	1.5"	.071"
2.675"	1.5"	.071"
2.897"	1.5"	.071"
2.997"	1.5"	.071"
2.997"	1.5"	.091"
3.147"	1.5"	.091"

NOTE: Due to machining tolerances sizes may vary slightly!