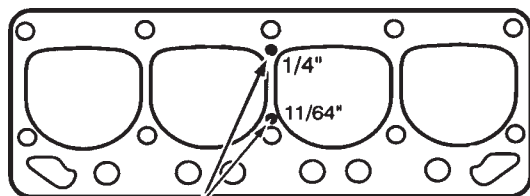


## HEAD GASKET



Add coolant holes if needed to block and heads.

**IMPORTANT:** For improved cooling the following modification is recommended by OEM.

If water holes are not present (see illustration) they should be added to the block and heads to allow for coolant flow between the center cylinders as follows:

Mask castings so steel chips do not enter bores or other passages.

### ADDING HOLES IN BLOCK:

Using the head gasket provided in this set as a template, position gasket with dowel pins on block.

Locate the center of the holes to be drilled.

Drill 1/8" diameter pilot hole at both locations.

Enlarge the upper holes to 11/64" diameter (Intake manifold side).

Enlarge the lower holes to 1/4" diameter (Exhaust manifold side).

### ADDING HOLES IN HEADS

Using the head gasket provided in this set as a template, position gasket on heads using 2 or more cylinder head bolts.

Locate the center of the holes to be drilled.

Drill 1/8" diameter pilot hole at both locations.

Enlarge the upper holes to 11/64" diameter (Intake manifold side).

Enlarge the lower holes to 1/4" diameter (Exhaust manifold side).

**Note:** When reinstalling the cylinder heads, the two longest bolts are installed at each end of the cylinder heads.

**ATTACH AND ALIGN GASKET(S) FOLLOWING ANY DIRECTIONAL MARKINGS SHOWN ON THE GASKET.** If no markings exist, simply install the gasket by matching the gasket to engine deck surface.

**FIBER FACED GASKET(S)** are to be installed dry. **METAL FACED GASKET(S)** require a thin even coat of general purpose gasket sealer to be applied to the metal side(s) of the gasket.

## VALVE STEM SEALS

### POSITIVE GUIDE SEAL:

Use plastic installation sleeve(s), to prevent damage to lip of seal. Trim plastic sleeve so it extends 1/16" below keeper groove. Place sleeve on stem. Carefully start valve stem seal over sleeve. Remove and reuse plastic sleeve. **FOR RUBBER JACKET SEALS:** Push seal over valve guide until it bottoms. **FOR SOLID/METAL JACKET SEALS:** Use of OEM service tool is recommended. If tool is unavailable, use deep socket or rigid tube of appropriate diameter. Center tool over shoulder of seal and tap seal down over guide until it bottoms.

### UMBRELLA TYPE SEAL:

Start valve stem seal over valve stem; push seal down on seal body until it touches top of valve stem guide. Seal will find its proper position on stem once engine starts.

## VALVE COVER/PUSH ROD COVER

**ATTACH AND ALIGN GASKET(S):** Use a quick-drying adhesive applied sparingly. If gasket has installation tabs, adhesive is not required. **IMPORTANT:** If gasket is rubber, install dry.

## INTAKE MANIFOLD GASKET

**V-TYPE ENGINES - FIBER SIDE GASKET(S) ALONG WITH FRONT AND REAR END SEAL(S):** Attach and align gasket(s) and end seal(s) using a quick-drying adhesive sparingly. **PRIOR TO INSTALLING INTAKE MANIFOLD** apply a dab of silicone sealer where all gaskets and seal meet.

**INLINE ENGINES:** Attach and align gaskets to cylinder heads.

**IMPORTANT: WHEN INSTALLING STEEL SHIM GASKET(S):** Apply general purpose gasket sealer around intake ports on both sides. If gasket(s) have water ports, apply a 1/8" continuous bead of silicone sealer around each water port on both sides. While RTV is wet, install intake manifold.

## EXHAUST MANIFOLD GASKET

**ATTACH AND ALIGN GASKET(S).** If gasket has only one steel faced side, install steel side towards manifold.