

*obsolete***PROBLEM:**

Some of the early S2 units may develop a rattling sound which seems to come from the right engine cover. The noise is most noticeable with the transmission in neutral, clutch hand lever released. When the hand lever is pulled, the rattling sound is eliminated. Usually, the noise is not present in a new unit, but develops within the first 500 miles of driving, if it occurs at all.

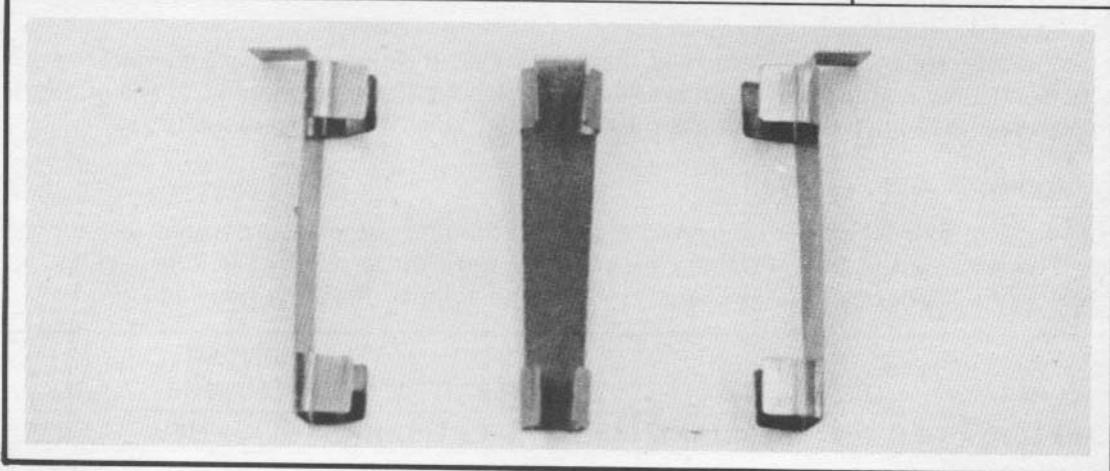
**CAUSE:**

The rattling noise is evidence of excessive clearance between the clutch housing drive fingers and the driven tabs on the friction plates. Slight variations in the clutch housing RPM resulting from engine firing impulses cause the housing to speed up and slow down slightly, and the tabs of the friction plates, held together by the clutch spring, are struck on one side (load) and then the other side (coast) by the housing fingers. Standard clearance between the fingers and the tabs is 0.002-0.022" (0.05-0.555 mm). As the clearance exceeds 0.010" (0.25mm), however, clutch rattle becomes more evident.

**CORRECTION:**

To take up the excessive clearance, Kawasaki has prepared clutch finger shims. Three shims are needed to repair one clutch.

PART NO.	DESCRIPTION	PKG. QTY.
92037-079	Clamp, 0.014" (0.35mm) thick	12 ea.
92037-080	Clamp, 0.010" (0.25mm) thick	12 ea.

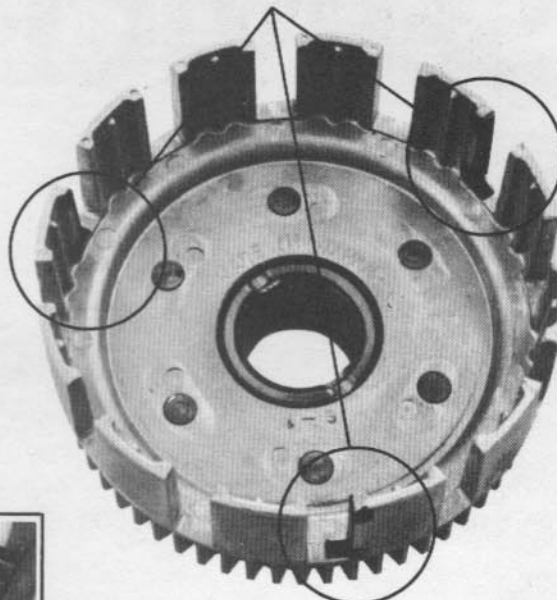


Please see reverse side for additional information.

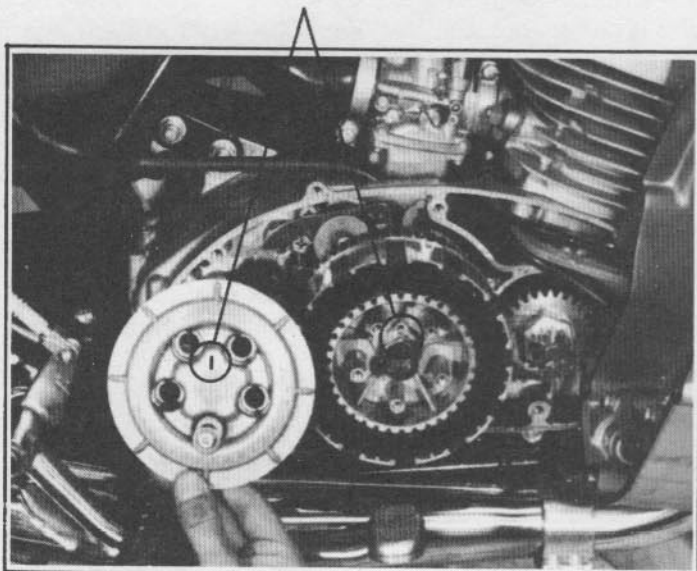
SHIMS ON "COAST" SIDE ONLY

**REPAIR:**

To install the shims, drain the oil and take off the right engine cover. Remove the pressure plate bolts and springs, and then take off the pressure plate and pull the clutch plate "pack". Install the three shims as shown here, at 120° intervals, or 4 fingers apart. **IMPORTANT:** The shims must be installed on the "coast" side of the clutch housing finger. **NOTE:** Make sure the three shims are all the same thickness.



ALIGN MARK WITH LOCKWASHER HOLE



To assemble the clutch, start with the outer steel plate which is 0.075" (1.9mm) thick. Then install a friction plate, with spring ring. Alternate steel and friction plates until there are 5 steel and 6 friction plates. **NOTE:** The other 4 steel plates are 0.063" (1.6mm) thick. Make sure the pusher is in place, and then "time" the pressure plate as shown here.

Insert the clutch springs, and install the bolts with washers. Tighten the bolts to 4 lb.-ft.

**CHECKING FOR DRAG:**

At this point, operate the clutch lever and make sure that the clutch disengages smoothly and that the plates don't drag as the hand lever is released, which would cause slipping. If the plates drag, it will be necessary to remove the shims and file the "coast" side of the fingers slightly.

**IMPROVED PART:**

After Engine No. S2E-10304, an improved clutch housing has been incorporated to eliminate the problem. The housing fingers are treated with a solid lubricant to resist wear. The new housing can be identified by its dark color, as compared to the white color of the early housing.

DESCRIPTION	OLD PARTS		NEW PARTS		INTER-CHANGE	EFFECTIVE I.D.
	OLD P/N	REMARKS	NEW P/N	REMARKS	OLD ↔ NEW	
Clutch Housing	13095-030	White Color	13095-032	Dark Color	— X — ← ⊕ →	S2E-10304
Clutch Housing Shims	—	—	92037-079 92037-080	0.35mm 0.25mm	—	Field Serv-ONLY

⊕ = interchangeable X = not interchangeable □ = not available

**WARRANTY INFORMATION:**

This is a factory production change for routine product improvement. This bulletin is for notification of modification only, not for warranty authorization. ■