AMERICAN HONDA MOTOR CO., INC.

SERVICE BULLETIN

TL #27 6/8/67

## **CHANGE OF THREADED PARTS**

## IMPORTANT!

In an effort to obtain more universal uniformity of threaded parts, the J.I.S. (Japan Industrial Standards) threaded parts standards have been modified to conform with those established by I.S.O. (International Standards Organization). All Japanese industry, including Honda Motor Co., is cooperating in this change. Although the modifications of the present J.I.S. system are not extensive, this change will require some new tools, different tool applications, and will introduce the possibility of non-interchangeability of similar parts.

This change-over will be effective from the start of production of all new motorcycle models first produced after the beginning of 1967. In all other models, those previously in production, the change-over will be made gradually and on no set schedule.

The following will describe the modifications and the effect they will have at the dealer level:

- 1. Change in Thread Form -- The minor diameter of internal threads will be decreased slightly in all sizes. This change is very minor and will not affect interchangeability in any way.
- 2. Height of Bolt Heads -- There will be minor changes to the height (thickness) of bolt heads in several sizes. These changes will not affect interchangeability.
- 3. Thickness of Nuts -- The thickness of both common and thin nuts will be reduced in sizes 8 mm and smaller. These changes will not affect interchangeability.
- 4. Width Across Flats of Bolts and Nuts - The width across the flats of the hex (the wrench size) is changed for all nuts and bolts except 6 mm.

Normal Dia. (Size of Bolt or Nut)	Width Across Flats (Wrench Size)	
	Present J.I.S.	Modified J.I.S. (I.S.O)
3 mm	6 mm	5.5 mm
4 mm	8 mm	7 mm
5 mm	9 mm	8 mm
6 mm	10 mm	10 mm
8 mm	14 mm	12 mm
10 mm	17 mm	14 mm
12 mm	19 mm	17 mm
14 mm	21 mm	19 mm
16 mm	23 mm	22 mm
18 mm	26 mm	24 mm
20 mm	29 mm	27 mm

New wrenches in the 5.5 mm, 7 mm, 12 mm, 22 mm, 24 mm and 27 mm sizes will be required for the modified bolts and nuts. All other sizes are currently in use.

This change in hex size affects only the wrench sizes; interchangeability of bolts and nuts is not affected.

Change in Thread Pitch -- The standard thread pitches for all bolts, nuts, and screws in the 3 mm, 4mm, 5 mm and 12 mm sizes are changed as indicated below:

Normal Dia.	Thread Pitch	
(Size of Bolt or Nut)	Present J.I.S.	Modified J.I.S. (I.S.O)
3 mm	0.6	0.5
4 mm	0.75	0.7
5 mm	0.9	0.8
12 mm	1.5	1.25

These changes will affect the interchangeability of threaded parts in these sizes.

Care must be taken to use the correct pitch to avoid stripping.

These changes will also require new taps and dies.

New tools, where required, will be available through parts department.

To help avoid confusion in the 3 mm, 4 mm, 5 mm and 12 mm size, wherein the thread pitch has been changed, the modified J.I.S. (I.S.0.) threaded parts used by Honda will be marked such that they can be readily identified. The marks used are as follows:

Part Type	Description of Marking	
Std. Hex Bolt	A number, indicating the strength of the bolt, will be embossed on the top	
	of the bolt head. This mark will appear on modified J.I.S. (I.S.O.) bolts of	
	all sizes, but as explained above all sizes except 4 mm, 5 mm, and 12 mm	
	(there are no 3 mm hex bolts) will interchange with the present J.I.S. parts.	
Slotted Hex Bolt	There will be a hemispherical embossment (bump) on the top of the bolt	
	head in the 4 mm and 5 mm sizes (3 mm and 12 mm slotted hex bolts are	
	not in use).	
Cap Bolt	There will be a hemispherical dimple on the side of the bolt head in the 4	
	mm, 5mm and 12mm sizes (3 mm not in use).	
Stud Bolt	There will be a hemispherical dimple or embossment on the nut end in the	
	5 mm and 12 mm sizes (3 mm and 4 rom studs are not in use).	
All Cross Recess Screws	There will be a hemispherical embossment on the top of the screw head in	
	the 3 mm, 4 mm and 5 mm sizes (12 mm not used).	
All Nuts	There will be a hemispherical dimple on either the top or side of the nut in	
	all sizes with changed pitch. This will also apply to nuts that are	
	permanently welded to other parts.	

All mechanics and parts department personnel should read and understand this bulletin, to avoid confusion and damage to threaded parts when the change-over occurs.

Additional information relative to these changes part numbers, tool numbers, etc. will be published by parts department.

AMERICAN HONDA MOTOR CO., INC.
Service Department

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