S4Q
S4Q2
Engine

SERVICE MANUAL

Part number 47372932
1st edition English
August 2012

CASE IH AGRICULTURE

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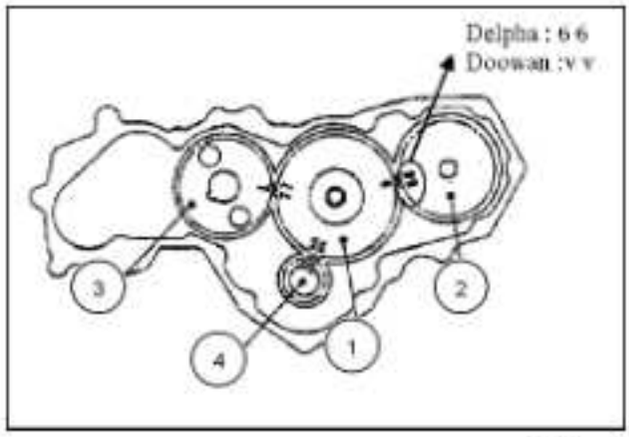
Crankshaft and flywheel - General specification

Item		Nominal size	Assembly standard	Repair limit	Service limit	Remarks
Crankshaft	Runout		**0.02 mm (0.0008 in)** maximum	**0.05 mm (0.0020 in)**		
	Diameter of Journal	**65 mm (2.56 in)**	**64.965 - 64.985 mm (2.55767 - 2.55846 in)**			
	Diameter of crank pin	**58 mm (2.28 in)**	**57.955 - 57.970 mm (2.28169 - 2.28228 in)**			
	Distance from center of journal to center of crank pin	**47.5 mm (1.870 in)**	**47.46 - 47.54 mm (1.8685 - 1.8716 in)**			
	Parallelism between journal and crank pin		Runout: **0.01 mm (0.0004 in)**, maximum			
	Out-of-round of journal and crank pin		**0.01 mm (0.0004 in)**, maximum	**0.03 mm (0.0012 in)**		
	Taper of journal and crank pin					
	Fillet radius of journal and crank pin	**3 mm (0.12 in)**	**±0.2 mm (±0.008)**			
	End play		**0.100 - 0.204 mm (0.00394 - 0.00803 in)**		**0.300 mm (0.01181 in)**	
Flywheel	Flatness		**0.15 mm (0.0059 in)**, maximum	**0.50 mm (0.0197 in)**		
	Face runout		**0.25 mm (0.0098 in)**, maximum			

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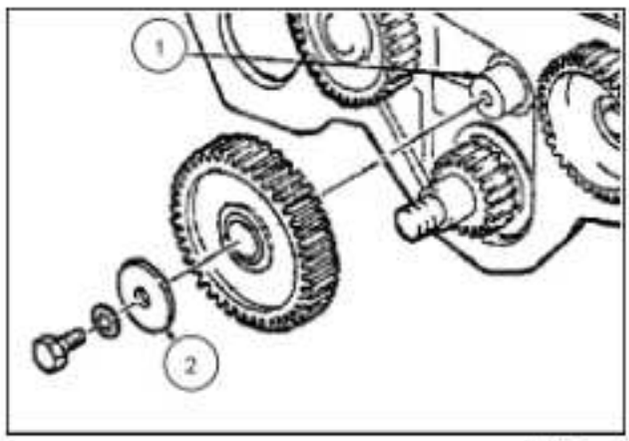
Idler gear - Install

1. Apply clean engine oil to the idler gear shaft.
2. Align all the timing marks and install the gear.



1

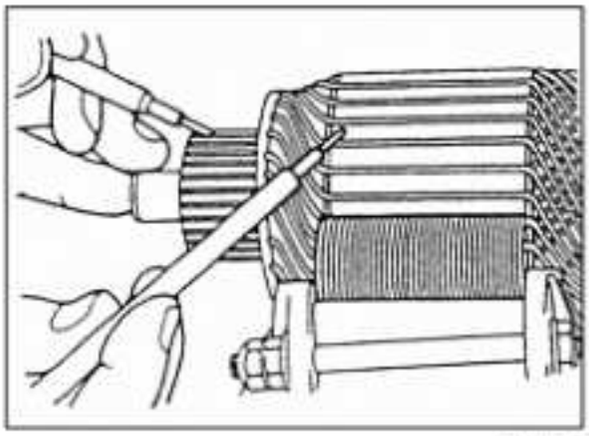
3. Install the thrust plate **(2)** on the idler gear and torque the bolt with washer to standard torque.
4. Move the idler gear back and forth in the axial direction to make sure it has correct end play.



2

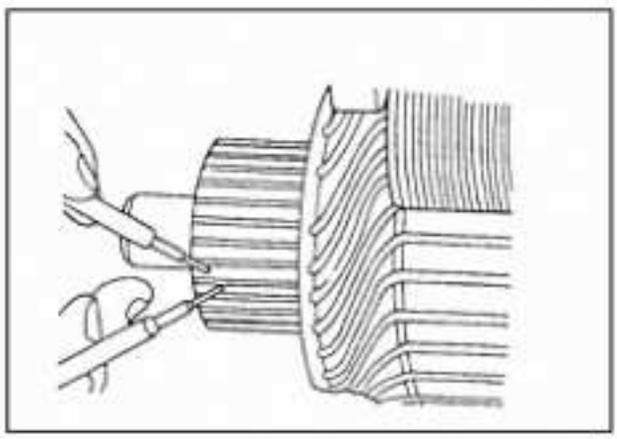
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8. Check for current flow between each terminal and body of the armature or coil. Replace the armature assembly if current flows.



7

9. Check for a short circuit between each of the terminals. If current does not flow, the coil of the armature is short-circuited and needs to be replace.



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10. Check for a short circuit between coil and yoke assembly. If current flows between them, the yoke assembly needs to be replaced.



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