

TECHNICAL FEATURES

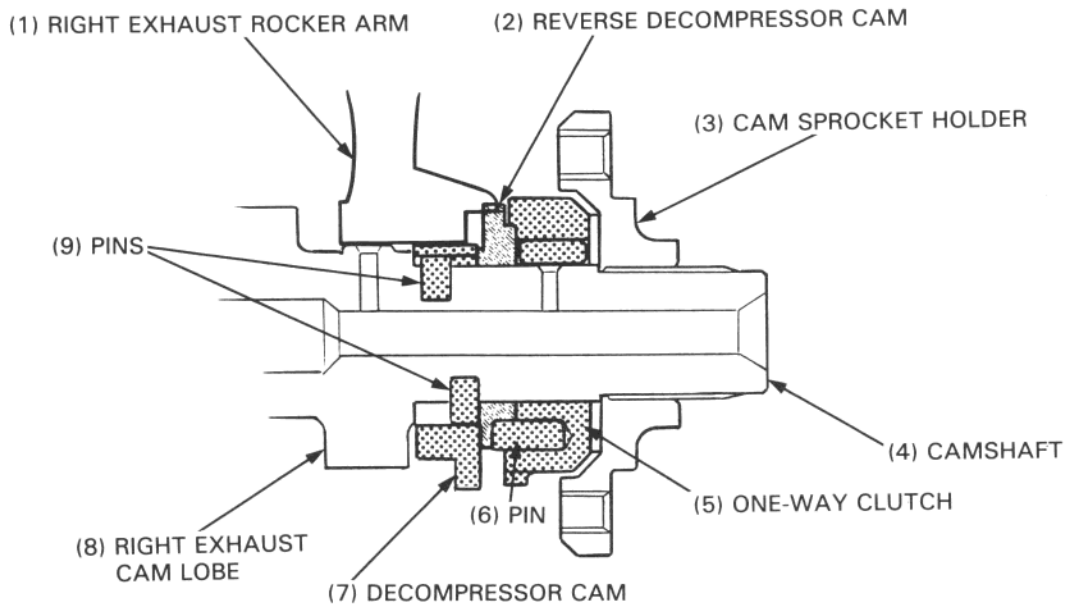
NEW DECOMPRESSOR SYSTEM

Description

The 1988 XR600R uses a new decompressor which eases the required starting force and also reduces starting kickback. This system is used on all 1988 4-stroke singles of 250 cc and larger engines. It is more compact and lighter than previous systems and is maintenance free. On the XR600R, it reduces the required starting force to that of a 250 cc engine.

Construction

The system uses two separate decompressor cams: one is for reducing the necessary kickover force (decompressor cam) and the other reduces starting kickback (reverse decompressor cam). Both of these decompressor cams slip onto the drive end of the camshaft. The decompressor cam is loosely keyed onto the camshaft which allows it to shift positions as the engine speed increases (after startup). The reverse decompressor cam rotates on a machined surface on the camshaft but it can only rotate in one direction because of a one-way roller bearing.



FUNCTION

Decompressor Cam

At TDC (on compression) the right exhaust rocker arm is contacting the normal cam lobe's heel (concentric circle) so that valve is closed, as would be normal. But on this model, the decompressor cam opens the exhaust valve a slight amount to reduce kickstarting force. After the engine starts, centrifugal force moves the position of the decompressor cam and it becomes flush with the normal cam lobe's heel.

