

NO.		<b>289</b>
MODEL		<b>CH/CV730</b>
DATE ISSUED	DATE REVISED	
<b>1/08</b>	<b>4/09</b>	

## Flywheel Timing Change

This bulletin applies only to **Serial Numbers 3522100011** and below.

CH/CV730 engines originally had 22° BTDC ignition timing. With that timing, reports of some head gasket failures were received after the engines got into the field, so the timing was then retarded to 16° BTDC. An offset flywheel key (Part No. 24 340 02-S) has now been created, so engines with 22° timing can be easily converted to the preferred 16° timing. If you are replacing a head gasket on a CH/CV730 engine, check which flywheel it has. If a 22° flywheel is in use, replacement of the straight key with an offset key is recommended.



### **WARNING: Accidental Starts!**

*Disabling engine. Accidental starting can cause severe injury or death. Before working on the engine or equipment, disable the engine as follows: 1) Disconnect the spark plug lead(s). 2) Disconnect negative (-) battery cable from battery.*

### Flywheel Identification

1. Determine the flywheel in use by comparing it to Figures 1 and 2.

NOTE: The 22° flywheel has no identification mark.  
The 16° flywheel has a hole that serves as an identification.

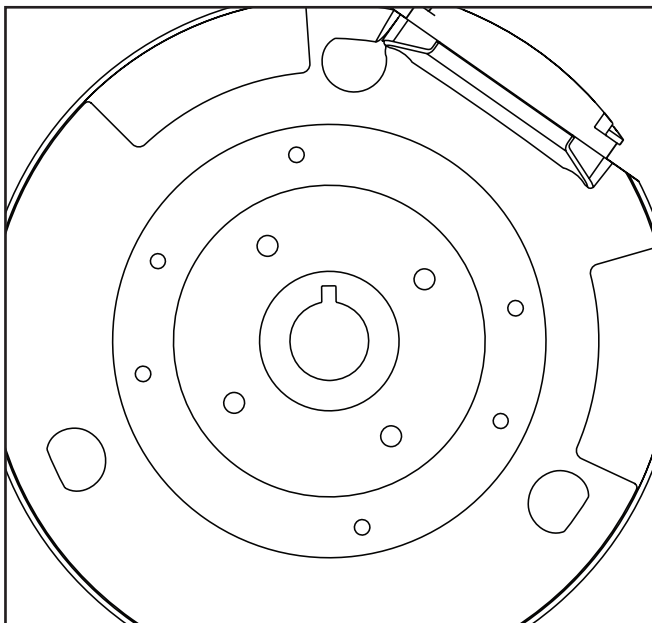


Figure 1. 22° Flywheel (no Identification Mark).

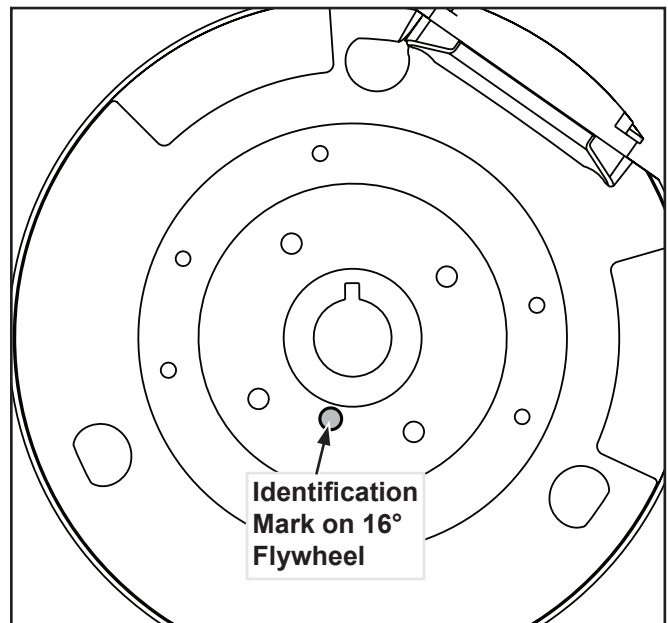


Figure 2. 16° Flywheel (with Identification Mark).

Routing	Service Manager	Sales Manager	Parts Manager	Chief Mechanic	Mechanic No. 1	Mechanic No. 2	Mechanic No. 3	Mechanic No. 4	Return This To
Initial Here									

## Installation of 6° Offset Key

The offset woodruff key (Part No. 24 340 02-S) is used to change the orientation of the original 22° flywheel to 16° timing.

NOTE: These instructions cover only an outline of what is involved. Refer to the applicable service manual for complete disassembly and reassembly procedures.

1. Remove the straight woodruff key and discard it. See Figure 3.
2. Install the 6° offset key. See Figure 4. Correct orientation of the key is necessary for proper ignition timing. The identification mark must face out, when viewing the flywheel as it is mounted. See Figures 5 and 6.

NOTE: Improper installation of the offset key can cause improper ignition timing and damage to the engine.

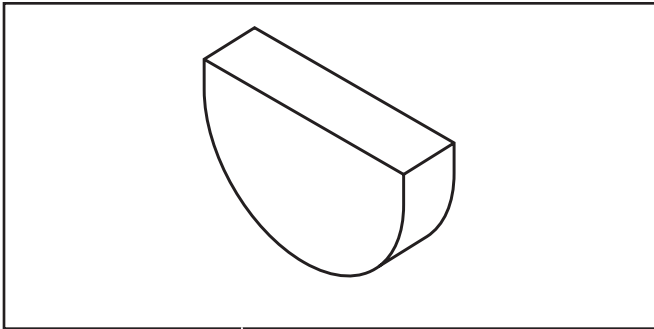


Figure 3. Straight Woodruff Key.

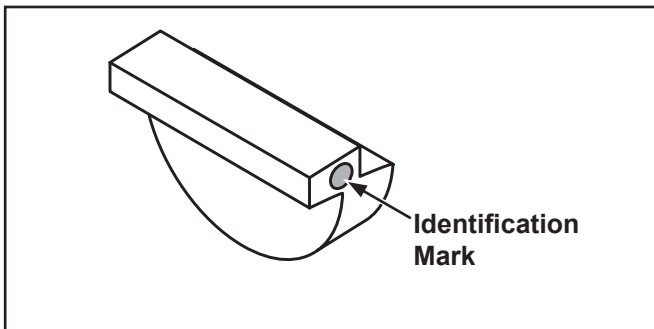


Figure 4. Offset Key (Part No. 24 340 02-S).

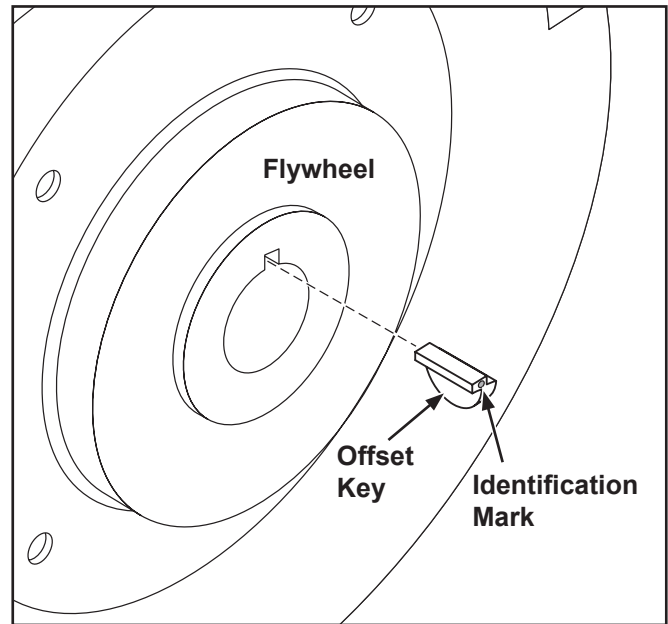


Figure 5. Correct Offset Key Installation.

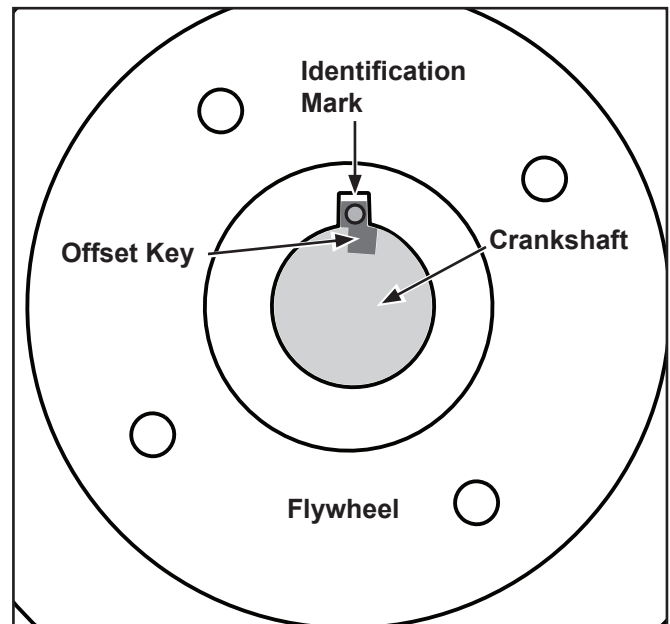


Figure 6. Correct Offset Key Orientation.

NOTE: If a 22° flywheel is being replaced on a CH/CV730 engine, it is recommended that a 16° flywheel (Part No. 24 025 48-S or 24 025 59-S) and straight woodruff key (Part No. X-42-15-S) be used.