88 Series Axial-Flow® Combines
New Product Introduction
Model Year 2009

Book 1: Grain Harvesting
Section: Combines
Form No: GH-2064-08
Replaces: None
Date: August 2008
**INTRODUCTION**

In the tradition of rotary combine industry leadership, Case IH continues to provide superior combine performance excellence. For 32 years, Case IH has developed the most efficient, reliable, and productive harvesting machines throughout North America and the world.

For Model Year 2009, with the announcement of the new 88 Series Axial-Flow Combines, Case IH continues its loyalty to the core principals that were established for the Axial-Flow combines 32 years ago to ensure that we meet or exceed our customer's expectations and deliver unmatched productivity, reliability, and performance. As the driving force to product development and enhancements, these core principals remain as important today as they were so many years ago when the first Axial-Flow combine rolled off the assembly line:

- Simplicity
- Grain Quality
- Grain Savings
- Crop Adaptability
- Match Capacity
- Resale Value

**2009 Model Year Offering and Horsepower Comparison for the 88 Series Combines**

**7088 Axial-Flow Combine Product Offering**

- New Class VII Model Offering
- 325 HP Rated / 375 HP Maximum
- 25 HP Power Rise / 25 HP Unloading Boost
- Case IH 9.0L 6 Cylinder Engine with Full Authority Fuel Control
- 300 Bushel Grain Tank
- AFX Rotor Standard
6088 Axial-Flow Combine Product Offering

- Replaces the 2588 Axial-Flow Combine
- 305 HP Rated / 330 HP Maximum
- 25 HP Power Rise
- Case IH 8.3L 6 Cylinder Engine with Full Authority Fuel Control
- 300 Bushel Grain Tank
- AFX Rotor Standard
5088 Axial-Flow Combine Product Offering

- Replaces the 2577 Axial-Flow Combine
- 265 HP Rated / 290 HP Maximum
- 25 HP Power Rise
- Case IH 8.3L 6 Cylinder Engine with Full Authority Fuel Control
- 250 Bushel Grain Tank
- AFX Rotor Standard

2009 Model Year Production Serial Number Information for the 88 Series Combines

- 5088 for Model Year 2009 Y8G000101*
- 6088 for Model Year 2009 Y8G000101*
- 7088 for Model Year 2009 Y8G000101*

* All models of the New 88 Series Axial-Flow Combines will be serial numbered consecutively.

Case IH 2009 Model Header Offering

<table>
<thead>
<tr>
<th>Header Type</th>
<th>2577/2588</th>
<th>88 &amp; 20 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>3200 Series</td>
<td>3400 Series</td>
</tr>
<tr>
<td>Flex</td>
<td>1020</td>
<td>2020</td>
</tr>
<tr>
<td>Rigid</td>
<td>1010</td>
<td>2010</td>
</tr>
<tr>
<td>Pick-Up</td>
<td>2015</td>
<td>2016</td>
</tr>
<tr>
<td>Draper</td>
<td>2142/2152</td>
<td>2142/2152</td>
</tr>
<tr>
<td>Flex-Draper</td>
<td>2162</td>
<td>2162</td>
</tr>
</tbody>
</table>
HIGH LEVEL FEATURES

Feeding

Feeder Size

The 88 Series feeder size is matched to the volume requirements of the threshing and separating systems. The feeder width is 45.5 inches, which is as wide as some Class 8 combines.
**Feeder Chain**

A three-strand / two-slat serrated feeder chain is used to ensure positive crop conveyance. Serrations are rolled in, not stamp, promoting optimum material flow without sacrificing grain quality.

**Feeder Chain Tensioning System**

A new spring-loaded feeder chain tensioning system maximizes feeder chain tension accuracy while improving convenience for the customer.
Feeder Lift Cylinders

The 5088 uses two 2½-inch feeder lift cylinders and the 6088 and 7088 uses two 3-inch feeder lift cylinders. A third cylinder option is no longer required for larger headers.

Belt Drive System

A simple, reliable, and field proven belt drive system is used to drive both the header and feeder. It has proven over time to meet customers’ demanding needs.
**New Feeder Reverser System**

The 88 Series has a new feeder reverser system. This is a high performance, electro-hydraulic reverser with positive gear-to-gear engagement that only engages when reversing is required.

**Single Lever Header Latching System**

The 88 Series now incorporates the same single lever header latching system used on the 7120/8120/9120 combines and the Case IH hydraulic multi-coupler which enables fast and easy header hook-ups.
Optional Two-Speed Header Drive

A new optional two-speed header drive provides improved header-to-ground speed matching. This is especially valuable for corn harvesting to improve material flow and optimize capacity.

Optional Terrain Tracker® Lateral Tilt System

The optional Terrain Tracker Lateral Tilt system lateral tilt system is available to meet the operational needs on larger headers. This new lateral tilt system provides an expanded 5 degrees of header tilt in both directions for a total of 10 degrees.
One-lever Operation Rock Collection Box

To meet requirements for rock protection, the optional rock trap attachment provides a full width collection box with easy, one lever operation.

Threshing and Separating
Transition Cone and Rotor Impeller System

The heart of the Axial-Flow combine is the patented transition cone and rotor impeller system.

Rotor Impellers

The rotor impellers sweep the crop from the feeder and, along with transition cone vanes, accelerate it up to threshing speed, ensuring maximum capacity and throughput while reducing potential crop damage.
Axial-Flow Rotor

The Axial-Flow rotor adds dramatically to the overall capacity of the Axial-Flow combine. The new impeller design and multiple rasp bars provide total crop threshing and mat control even in tough, green conditions.

Axial-Flow Rotor

The rotor and cage design takes full advantage of multiple pass threshing/separating as well as gentle grain-on-grain threshing.

Rotor and Cage Design
Three-section Concave Design

The three-section concave design with optional concave types means that capacity is not compromised.

The concave wrap around the Axial-Flow rotor is 156 degrees which is wider than on most combines. This wide wrap design adds greatly to combine efficiency because the crop is in the effective threshing/ separating zone longer.
The three-section, 133-degree wrap separating grate design with optional grate types means that there is no compromise on harvesting performance or capacity.

Capitalizing on centrifugal force separation provided by the multiple pass rotor design, crop is thoroughly separated a full 360 degrees around the rotor cage.
Crop Control - Adjustable Cage Vanes

Crop control is key to performance and capacity. It is important to hold the crop mat in the machine long enough to thoroughly process the crop but not long enough to over-thresh the crop, reducing capacity.

Proper Mat Control Prevents Over-threshing

Ensuring crop mat control, the Axial-Flow combines have always had fully adjustable cage vanes in the threshing and separating areas.

Fully Adjustable Cage Vanes in Threshing and Separating Areas
Once the crop has exited the rotor cage, a five bed auger system effectively transfers this material on to the cleaning system.

When the crop mat enters the grain pan area, it is able to level out on the grain pan and grain pan fingers. This enables the crop mat to drop on the sieve area in a more even flow.
The Axial-Flow 88 Series has a very large cleaning system for its class size for maximum capacity.

- 5088 - 7,947 sq. in. (5.1 m²)
- 6088 - 7,947 sq. in. (5.1 m²)
- 7088 - 7,947 sq. in. (5.1 m²)

The top sieve is a three-section fully adjustable design that allows the sieve to be fine tuned to match the customer’s cleaning requirements. The bottom sieve is opposed action.

Standard external sieve adjustments are located on the left-hand side of the combine.
An optional in-cab sieve adjust feature is available all models which includes a ground level adjustment switch bank.

Adjustment Switch Bank

Two standard external sieve viewing access doors (chaffer and shoe) improve visual access. A magnetic sieve light/portable service light is included.

Magnetic Sieve / Portable Service Light

Cross Flow® Cleaning Fan

While it is important to have plenty of air flow for cleaning, it is more important to have a balanced air flow supply.
The Cross Flow® cleaning fan supplies both of these. Air enters the full width fan from the top not the sides. After entering the fan, a vortex is created which super charges the airflow, giving a full balanced flow to the entire sieve.

Cross Flow Cleaning Fan

GRAIN HANDLING

Redesigned Clean Grain Elevator System

The Clean Grain elevator system has been redesigned in three key areas for increased elevator capacity:

- Clean grain cross auger increase in overall diameter of (1/2) inch (12.7mm)
- Inlet to clean grain elevator and inclined delivery auger redesigned
- Cross auger increase in overall size
- Ground level chain adjustment
The clean grain elevator capacity is rated at 3,450 bu./hr. (a 15% increase over the 2588).
Grain Tanks

The Axial-Flow 88 Series have large grain tank capacities.

- 5088 - 250 Bu. (8810 L)
- 6088 - 300 Bu. (10,570 L)
- 7088 - 300 Bu. (10,570 L)

All 88 Series have quick foldable grain tanks extensions which can be folded or unfolded without tools for roading, transporting and storage. A new single lever bubble up auger folding design increases convenience.

Foldable Grain Tank Extension
All 88 series combines have an optional in-cab electrically actuated folding grain bin extensions available. This option folds both the grain tank extensions and the inclined delivery auger at the same time. This option consists of a cab switch in head liner, electrical actuator, in-tank bell crank assembly, and inclined delivery auger cable.

---

**Electrically Actuated Folding Grain Bin Extensions**

The 88 Series grain tank cross auger drives have been substantially increased in strength. This includes a heavier drive engagement belt (2HC) and heavier drive sprockets and chains (H60).
Fast Unloading Times

The Axial-Flow 88 Series have fast grain tank unloading rates:

- 5088 - 2.5 Bu/Sec (88 L/Sec)
- 6088 - 3.0 Bu/Sec (106 L/Sec)
- 7088 - 3.0 Bu/Sec (106 L/Sec)
New, longer unloading tube lengths with added component material thickness provide greater reach for larger headers:

**5088**
- Standard: 21 ft. (6.4 m)

**6088**
- Standard: 21 ft. (6.4 m)
- Option: 24 ft. (7.3 m)

**7088**
- Standard: 21 ft. (6.4 m)
- Option: 24 ft. (7.3 m)

**Full Grain Tank Sensors**

One adjustable Full Grain tank sensor is standard equipment to warn the operator of grain volume.

An optional second sensor is available to provide more information to the operator:

- 75% Full - First sensor activates the "Grain Tank Full" alarm and chime (optional rotating beacon (s) will be activated)
- 100% Full - Second sensor activates audible alarm and faster "Grain Tank Full" blinking alarm.
Residue Management

Spreader Curtain

A new full surround spreader curtain provides improved spreading performance by better channeling material into the larger diameter spreaders. Spreaders have curved bats for improved material spread.

Full Surround Spreader Curtain

Standard Three-bladed Beater / Optional Two-Speed Chopper

A three-bladed beater is standard equipment. An optional two-speed chopper is also available to match the customer’s residue requirements.

Three-bladed Beater
Rear Spreader - New Window Formation Board

A new windrow formation board incorporated into the rear spreader provides increased adaptability to meet customers’ needs.

For normal widespread operation, the formation board is in the down position and retained by quick pins.

For windrow mode, remove the spreaders, and reposition the formation board in the up position and secure with pins.
ENGINE AND DRIVES

All combines are now equipped with full authority electronic fuel delivery systems and are Tier III certified.

* Tier III Certified Engines with Electronic Fuel Control are turbo-charged and air-to-air intercooled.*
  - All engines are turbocharged and air-to-air intercooled.
  - All engines are equipped with a grid type pre-heater for cold weather starting assist.
• Radiators are in-line core with deaeration tanks.

Case IH Axial-Flow 88 Series Matched Capacity Engine Performance

The 88 Series combines feature matched capacity engine performance.

5088

• 265 Rated HP (198 kW)
• 25 HP Power Rise (19 kW)
• 290 Max HP (217 kW)
6088
• 305 Rated HP (227 kW)
• 25 HP Power Rise (19 kW)
• 330 Max HP (242 kW)

Axial-Flow 6088 Combine

7088
• 325 Rated HP (227 kW)
• 25 HP Power Rise (19 kW)
• 25 HP Unload Boost (19 kW)
• 375 Max HP Power Rise

Axial-Flow 7088 Combine
OVERVIEW - 88 SERIES FEATURES

Stationary Air Screen

A stationary air screen uses a revolving hydraulically powered evacuation wand for positive cleaning of the stationary screen (35 wand RPM).

![Revolving Evacuation Wand on the Air Screen](image)

Material is positively pulled away from the stationary screen and deposited down and to the back of the combine. Options for this system include an internal brush and an engine air screen guard.

![Debris chute deposits material at the rear of the combine.](image)

Wheelbase

The 88 series the wheelbase has been increased by 9". Balance was improved to a 60/40 weight split from 70/30 on the 2588.
Front Axle

The front axle has been moved ahead 4" and the integrity of the side frame to axle joint has been strengthened.

Rear Axle

The rear axle has been moved back 5" and the entire rear frame has been redesigned and strengthened.
TRANSMISSIONS

All 88 series use the proven 3 speed transmissions (37/35 & 34/38 ratios)

Hydrostatic pumps and motors have been upgraded and a foot-n-inch valve has been eliminated.

<table>
<thead>
<tr>
<th>Hydro Comparison</th>
<th>5088</th>
<th>6088</th>
<th>7088</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump</td>
<td>105cc</td>
<td>125cc</td>
<td>125cc</td>
</tr>
<tr>
<td>Motor - Single Speed</td>
<td>89</td>
<td>105</td>
<td>105</td>
</tr>
<tr>
<td>Motor - Two-speed</td>
<td>89/68 cc</td>
<td>105/81</td>
<td>105/81</td>
</tr>
</tbody>
</table>
Final Drives

All 88 series use the heavy duty final drives from the field proven 2500 Series Axial-Flow combines.

Optional Power Guide Rear Axle Assembly

The 88 Series has a new optional robust power guide rear axle assembly. Included are heavier tubes, extensions, pinions, anchors and hardware.
Standard Two-Wheel Drive Axle

The standard two-wheel drive axle has common components with the power guide rear axle assembly plus an offset rear axle king pin design.

- This offset rear axle design allows for a tighter turning radius without interfering with the frame or body panels on the combine.

Torque Sensing Belts

The 5088 uses the same torque sensing belt width as the 2588. It also uses the similar ramp angle at 24 degrees.

The 6088 and 7088 combines use a ¾" wider belt as compared to the 5088 and also use an enhanced 30 degrees sheave ramp angle to improve horsepower to belt transfer.
All torque sensing units have these features as well:

- Shaft size increased
- Bushing width increase
- Cam followers now have "captured" slides instead of rollers

**Torque Sensing Belt**

<table>
<thead>
<tr>
<th>Rotor Drive</th>
<th>5088</th>
<th>6088</th>
<th>7088</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belt</td>
<td>2.25</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Pulley</td>
<td>24 degrees</td>
<td>30 degrees</td>
<td>30 degrees</td>
</tr>
</tbody>
</table>
Improved Rotor Drive Components

All 88 Series rotor drive components have been updated and enhanced with heavier duty components including the heavy duty three-speed rotor drive gear case.

Rotor speeds now range from 250 to 1150 rpm.

Shifting of the rotor gearbox is located on the RH side below the chopper HI/LO.
MAINTENANCE

New Rear Ladder and Service Deck Design
The rear ladder has been redesigned for easier operation, strength and safer access to rear service deck.

New Service Deck
Access to engine service and check points such as fuel fill, air cleaner and fluid levels is now even easier with the new service deck and ladder design.

New Ladder Design
A two-stage air cleaner with aspirator ensures clean, unrestricted airflow to the engine.

Large Swing-up Side Panels

Large swing-up side panels assist in easy maintenance and service of the combines:

- Easy access to all sides of the machine
- Side panels are equipped with a quick release latch design and have a gas strut or truss rod to secure the panel in the open position.
- A transport locking mechanism to keep side panels secured during road transportation
- Optional under panel service lights
Radiator access door swings wide and makes getting to the radiator and coolers for routine service easier than ever.

Swing-out Radiator Access Door

**CAB AND CONTROLS**

Plenty of comfort and convenience features put the customer in complete command of the 88 Series combines.
The large, 66-inch wide operator’s cab with 55 square feet of total glass area ranks the combines high in the industry in size, comfort, and visibility.

*Cab is 66 inches wide and has 55 square feet of glass.*

A new cab air cleaner located on the right-hand side of the cab provides exceptionally clean air.

**New Multi-function Propulsion Lever**

A new multi-function propulsion lever (common with 20 Series) gives the operator maximum control with minimum effort.

*Multi-function Propulsion Lever*
Automatic Crop Settings (ACS) Option allows the operator to preset the machine for rotor and fan speeds, concave clearance as well as sieve openings.

The new A-post instrumentation has increased functionality and performance including % engine horsepower for overall productivity.

A-post Instrumentation

Three new seating options are available, including a new heated red leather option.
Visibility and Safety

Outstanding visibility and safety features include:

- Stadium lighting for outstanding visibility when harvesting at night
- Optional HID Lighting - 2 and 6 HID lighting packages offer a "Farming in High Definition" feel that gives unprecedented clarity and visibility during night time operations, both ahead of the cutter bar as well as behind
- Optional rotating beacons are available

AFS Pro 600 Display

A fully portable AFS Pro 600 color display features a touch-screen full color display and can be used with yield logging, yield mapping, and auto guidance with up to sub one-inch accuracy.
An optional, fully portable AFS AFS 262 receiver with quick release latches is capable of receiving WAAS/EGNOS, OmniSTAR VBS, OmniSTAR HP, and RTK signals.

SUMMARY

As in the past, with the offerings and improvements planned for Model Year 2009 88 Series combines, it is clear that Case IH continues to strive to meet Axial-Flow combine customers’ needs, both now and into the future. In its effort to consistently strive to improve harvesting products, Case IH aims to bring new levels of ease, productivity and profitability to all Case IH customers.

THE CASE IH ROTARY LEADERSHIP CONTINUES...
The information presented herein is intended for sales education purposes and is intended for the use of CNH America LLC, its affiliates, and its independent dealers only. This information is to be treated as CONFIDENTIAL and is not to be used for advertising purposes. Competitive comparisons are based on competitive information known at time of printing. Sources of information include published industry specifications and data. General statements made herein are the opinions of the authors concluded from supporting data.

Note: Specifications are stated in accordance with industry standards or recommended practices, where applicable.

Important:
CNH America LLC reserves the right to change product specification without notice and without incurring any obligation relating to such changes.

Any trademarks referred to herein in association with the goods and/or services of companies other than CNH America LLC are the property of those respective companies.

Visit Case IH on the Web at www.caseih.com/na