AM107423 – Oil Filter

- Metal End Discs
- Pressure Relief Valve
- Tapping Plate
- Durable Steel Shell
- Retainer
- Pleated Cellulose & Synthetic Blended Filter Media
- Nitrile Anti-Drainback Valve
- External Nitrile Sealing Gasket
AM107423 – Engineered and Tested

- Engineered and Tested for your specific application and Service Intervals

- Filtration efficiency and dirt holding capacity – Engine bearing clearances are designed to operate at a given clearance. It is imperative to remove particles greater than this clearance. John Deere oil filters are designed with a specific engine in mind and have the optimum filtration performance at given contaminant sizes. International test procedure ISO 4548-12.

- Dirt holding capacity – John Deere oil filters are designed with specific dirt holding capacity that has to live through the entire change interval without plugging. These values are typically confirmed by engine dyno testing. ISO 4548-12

- Filter durability – Vibration, impulse fatigue, hydrostatic burst tests are all examples of durability testing. Engine durability testing was performed using these specific filter characteristics. Only John Deere oil filters can make this claim. ISO 4548-5 cold start simulation and impulse fatigue.

- Specially designed and tested to meet the specific needs for each application for John Deere engines. Where other competitive will-fit companies offer one filter that fits multiple applications can possible cause damage to your engine.
AM107423 – Anti-Drainback Valve

- Anti-Drainback valve gets oil to your engine components faster
- Designed to keep oil from draining out of your engine oil filter during engine shutdown. Keeping oil in the engine oil filter enables oil to get into your engine quickly preventing dry starts and protecting your engine.
- Silicon or nitrile. Silicon handles higher temperatures better than nitrile. We use both. The point is, engines run at different temperatures, have different oil system characteristics and different filter mounting locations. All of these impact the need for an anti-drainback valve and the material selected. ISO 4548-9
AM107423 – Pressure Relief Bypass Valve

- Pressure relief bypass valve No Oil = Engine Failure
- Pressure relief bypass valve flow characteristics and opening pressures are matched to the engine oiling system requirements. If the valve opens too early contaminate may be allowed into the engine. If it opens to late the engine may be starved for oil. ISO 4548-2
- The pressure relief valve assures oil flow to engine during cold weather start-up
- Specially designed and tested to meet the specific needs for each application for John Deere engines. Where other competitive will-fit companies offer one filter that fits multiple applications can possible cause damage to your engine for example pressure relief valve not opening at the correct pressure.

Pressure Relief Valve
AM107423 – Filter Media and Metal End Caps

- Filter Media with even pleats and media spacing ensures even filtration for better overall protection.
- Filter Media not too much or not too little. Too little filter media looses the ability to capture dirt and debris, too much filter media can affect the spacing of the pleats. If the spacing is too tight, oil can not reach the bottom of the pleats actually reducing the amount of filter media. Too little media and you reduce capacity.
- Steel center tube with multiple holes for low restriction and provides internal strength to prevent filtration media from collapsing and letting unwanted particles into your system.
- The metal end discs are completely glued to the filter media using plastisol adhesive providing a leak free seal so the oil gets filtered.
- Metal end discs on the filter media adds strength to prevent the media from collapsing and letting unwanted particles into your system.
- Metal end discs provides extra strength than cardboard used end caps found in some competitive filters.
- Filter Media contains natural cellulose fibers that are blended with micro-fine synthetic fibers to create a depth media that has high efficiency, high capacity and low restriction for proper oil filtration.

Pleated Cellulose & Synthetic Blended Filter Media

Metal End Discs
Filter Media - Contents

75 times magnification of Filter Media.

- Micro-fine Synthetic fibers
- Cellulose Fibers
Why John Deere Oil Filter AM107423

- Specially designed and tested to meet the specific needs for each application for John Deere engines
- Anti-drainback valve keeps oil in the engine oil filter preventing dry starts and protecting your engine
- Where other competitive will-fit companies offer one filter that fits multiple applications that can possibly cause damage to your engine
  - Pressure relief bypass valve does not have the same range as the John Deere oil filter
    - If the valve opens too early contaminant may be allowed into the engine lubrication system
    - If it opens too late the engine may be starved for oil causing engine failure
- Metal end discs for strength
- Filter Media with even pleats and spacing for even filtration
- Filter Media contains natural cellulose fibers that are blended with micro-fine synthetic fibers for proper oil filtration
AM125424 – Oil Filter

- Durable Steel Shell
- Conical or Coned-disc Relief Valve
- Pleated Cellulose & Synthetic Blended Filter Media
- Silicone Anti-Drainback Valve
- Metal End Discs
- Tapping Plate
- External Nitrile Sealing Gasket
Engineered and Tested for your specific application and Service Intervals

Filtration efficiency and dirt holding capacity – Engine bearing clearances are designed to operate at a given clearance. It is imperative to remove particles greater than this clearance. John Deere oil filters are designed with a specific engine in mind and have the optimum filtration performance at given contaminant sizes. International test procedure ISO 4548-12.

Dirt holding capacity – John Deere oil filters are designed with specific dirt holding capacity that has to live through the entire change interval without plugging. These values are typically confirmed by engine dyno testing. ISO 4548-12

Filter durability – Vibration, impulse fatigue, hydrostatic burst tests are all examples of durability testing. Engine durability testing was performed using these specific filter characteristics. Only John Deere oil filters can make this claim. ISO 4548-5 cold start simulation and impulse fatigue.

Specially designed and tested to meet the specific needs for each application for John Deere engines. Where other competitive will-fit companies offer one filter that fits multiple applications can possible cause damage to your engine.
AM125424 – Anti-Drainback Valve

• Anti-Drainback valve gets oil to your engine components faster

• Designed to keep oil from draining out of your engine oil filter during engine shutdown. Keeping oil in the engine oil filter enables oil to get into your engine quickly preventing dry starts and protecting your engine.

• Silicon or nitrile. Silicon handles higher temperatures better than nitrile. We use both. The point is, engines run at different temperatures, have different oil system characteristics and different filter mounting locations. All of these impact the need for an anti-drainback valve and the material selected. ISO 4548-9
AM125424 – Pressure Relief Bypass Valve

- Pressure relief bypass valve No Oil = Engine Failure
- This type of relief valve is called a "conical spring" or "coned-disc spring" relief valve
- The way it functions is when pressure builds up, the center area (top of the cone) actually deflects downward opening up channel for oil to flow.
- Pressure relief bypass valve flow characteristics and opening pressures are matched to the engine oiling system requirements. If the valve opens too early contaminant may be allowed into the engine. If it opens to late the engine may be starved for oil. ISO 4548-2
- The pressure relief valve assures oil flow to engine during cold weather start-up
- Specially designed and tested to meet the specific needs for each application for John Deere engines. Where other competitive will-fit companies offer one filter that fits multiple applications can possible cause damage to your engine for example pressure relief valve not opening at the correct pressure.
• Filter Media with even pleats and media spacing ensures even filtration for better overall protection.

• Filter Media not to much or not to little. Too little filter media looses the ability to capture dirt and debris, too much filter media can affect the spacing of the pleats. If the spacing is to tight, oil can not reach the bottom of the pleats actually reducing the amount of filter media. To little media and you reduce capacity.

• Steel center tube with multiple holes for low restriction and provides internal strength to prevent filtration media from collapsing and letting unwanted particles into your system.

• The metal end discs are completely glued to the filter media using plastisol adhesive providing a leak free seal so the oil gets filtered.

• Metal end discs on the filter media adds strength to prevent the media from collapsing and letting unwanted particles into your system.

• Metal end discs provides extra strength than cardboard used end caps found in some competitive filters.

• Filter Media contains natural cellulose fibers that are blended with mirco-fine synthetic fibers to create a depth media that has high efficiency, high capacity and low restriction for proper oil filtration.
Filter Media - Contents

75 times magnification of Filter Media.

- Micro-fine Synthetic fibers
- Cellulose Fibers
Why John Deere Oil Filter AM125424

- Specially designed and tested to meet the specific needs for each application for John Deere engines
- Anti-drainback valve keeps oil in the engine oil filter preventing dry starts and protecting your engine
- Where other competitive will-fit companies offer one filter that fits multiple applications that can possibly cause damage to your engine
  - Pressure relief bypass valve does not have the same range as the John Deere oil filter
    - If the valve opens too early contaminates may be allowed into the engine lubrication system
    - If it opens too late the engine may be starved for oil causing engine failure
- Metal end discs for strength
- Filter Media with even pleats and spacing for even filtration
- Filter Media contains natural cellulose fibers that are blended with micro-fine synthetic fibers for proper oil filtration