



# **8KS JD PROCESSOR SERVICE & PARTS MANUAL**



U.S. Patent No. 7,681,384 & 10,561,067

**Manual Part Number: DOC10032 (Rev. A)**







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# **SCHERER PROCESSOR**

## **Model: 8KS JD**

**U.S. Patent No.**

**7,681,384**

**10,561,067**

**Other Patents Applied For**

**Foreign Patents Applied For**

## **SERVICE & PARTS MANUAL**

### **Contact**

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# New Product Warranty

## LIMITED WARRANTY ON NEW SCHERER KERNEL PROCESSORS AND PROCESSOR ROLLS

Scherer, Inc. ("Scherer") will provide for repairs or replacement, at its option during the warranty period of each new Scherer Kernel Processors and/or new Scherer Kernel Processor Rolls in accordance with the following terms, conditions, and limitations.

### WHAT IS COVERED

**WARRANTY APPLIES** – This warranty is for new Scherer Kernel Processors and/or new Scherer Kernel Processor Rolls installed in a John Deere Forage Harvester by a John Deere certified technician, and is provided to the original and any subsequent owner(s) of the John Deere Forage Harvester during the warranty provision.

**REPAIRS COVERED** – The warranty covers repairs or replacement, at Scherer's option, to correct any malfunction resulting from defects in the design, material or workmanship occurring during the warranty period. Needed repairs or replacements will be performed using the method Scherer determines most appropriate under the circumstances.

**OBTAINING REPAIRS** – To obtain warranty repairs, contact Scherer at [portal.schererinc.com](http://portal.schererinc.com)

**WARRANTY PERIOD** – The warranty period for all coverages shall begin on the date of retail sale from the John Deere Dealer and shall continue for twelve months.

### WHAT IS NOT COVERED

**DAMAGE DUE TO ACCIDENT, MISUSE, or ALTERATION** – Defects and damage caused as a result of any of the following are not covered:

- Flood, Collision, Fire, Theft, Vandalism, Riot, Explosion, Acts of Terrorism;
- Misuse of the Forage Harvester;
- Installation into unapproved applications and installations;
- Alterations or modification of the Kernel Processor, Processor Rolls, or Forage Harvester;
- Anything other than defects in the Scherer Kernel Processor or Processor Roll design, materials, or workmanship.

**DAMAGE CAUSED by LACK of MAINTENANCE** – Defects and damage caused by the owner's failure to follow the recommendations of the maintenance schedule provided by Scherer or John Deere.

**MAINTENANCE** – Normal Maintenance (such as adjustments after initial installation and use as set out in the owner's manual; periodic maintenance as set out in the owner's manual based upon hours of use, and **END OF SEASON** maintenance as set out in the owner's manual) is not covered and is the owner's responsibility.

**USE OF OTHER THAN GENUINE SCHERER OR JOHN DEERE PARTS** – Defects and damage caused by the use of parts that are not genuine Scherer or John Deere parts are not covered.

**EXTRA EXPENSES** – Economic loss and extra expenses are not covered. Examples include but are not limited to: loss of Forage Harvester use, inconvenience, lost profits, loss of time, any travel costs.



## **OTHER TERMS APPLICABLE TO CONSUMERS AS DEFINED BY THE MAGNUSON -MOSS WARRANTY ACT**

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Scherer Design Engineering, Inc. does not authorize any person to create for it any other obligation or liability in connection with these Kernel Processors and Processor Rolls. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO THESE TRANSMISSIONS IS LIMITED IN DURATION TO THE DURATION OF THIS WRITTEN WARRANTY. PERFORMANCE OF REPAIRS AND NEEDED ADJUSTMENTS IS THE EXCLUSIVE REMEDY UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. SCHERER DESIGN ENGINEERING INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (SUCH AS, BUT NOT LIMITED TO, LOST PROFITS OR RENTAL EXPENSES) RESULTING FROM THE BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.\*\*

\*\* Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

## **OTHER TERMS APPLICABLE TO OTHER END-USERS**

THIS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO THE SCHERER KERNEL PROCESSORS AND PROCESSOR ROLLS AND IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SCHERER DESIGN ENGINEERING, INC. DOES NOT AUTHORIZE ANY PERSON TO CREATE FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SUCH KERNEL PROCESSORS OR PROCESSOR ROLLS. SCHERER DESIGN ENGINEERING, INC. SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS WARRANTY OR ANY IMPLIED WARRANTY.

## **QUESTIONS**

If you have any questions regarding this warranty or the performance of warranty obligations, you may contact Scherer, Inc. thru the dealer portal: [portal.schererinc.com](http://portal.schererinc.com) or email [warranty@schererinc.com](mailto:warranty@schererinc.com).



# Safety

**Warning:** Read and understand all of the following safety messages. Be familiar with general operating and maintenance instructions. Be sure to lock out the power supply before performing any maintenance and adjustments. The person performing the maintenance should be the only one with the ignition key for the cutter.

## General Safety Practices,

Always observe safe operating practices around machinery. Most accidents are the result of carelessness or negligence. All rotating machinery is potentially dangerous. Guard and operate rotating machinery as required by applicable laws, regulations and good standard safety practices.

Before doing any maintenance on engine driven machinery, turn off ignition. Remember, the person doing the maintenance or adjustment should be the only one with the ignition key.

Use the proper tools for each maintenance task. Keep lifting equipment in good condition and **DO NOT** stand under objects being lifted. Keep a clean work area to ensure workers have good footing.

## Inlet/Discharge Opening Hazard

The processor has an inlet and discharge opening. Injury will result if persons or objects fall into the inlet or discharge. A serious hazard exists if a person places their arm or any object into the inlet or discharge area of the processor. **DO NOT** remove protective guards.

## Belt Drive Hazard

Be sure that the belt guards are in place before operating the processor.

## Rotating Rolls Hazard

The rotating rolls are a severe hazard. The rolls turn at high speeds and operate with a grinding action that will pull objects between the rolls. Keep all body parts and all objects out of this area. **DO NOT** insert any part of your body or any tool into the roller area.

## Eye Protection

Wear approved safety glasses when working around all equipment. Moving machinery can throw objects unexpectedly.



## **Head Protection**

Wear an approved hard hat while installing the processor into and out of the SPFH. Falling objects or low overhead can cause serious injury while installing or removing the processor from the SPFH.

## **Hearing Protection**

Under normal operating conditions, this SPFH does not produce hazardous noise. However, the SPFH itself is very noisy when operated at full throttle. Wear approved hearing protection as needed when working around equipment.







# Processor Accessory Parts

A0006 1 Gal. Chevron Cetus® HyperSyn® Oil

A0006.5 5 Gal. Chevron Cetus® HyperSyn® Oil

A0008 Laser Temp. Gun

A0011 Laser Alignment Tool

A0021 SKF® Bearing Heater

A0022 Bearing Removal Tool



# Maintenance Intervals

## 1) After your Scherer Processor is installed

- Set your roll gap (See “Roll Gap Adjustment” section)
- Pass product through the machine, at least 5 loads under full power.
- Adjust rolls to your processing needs; however, **the processor is not intended to be run against the roll stops, so adjust accordingly.**
- Check adjustments 5 to 10 hours later to ensure adjustments are holding at your desired position. Check pulley alignment and make sure locking hubs are firmly in place.

## 2) 50 Hours

- Grease adjustment bolt zerks on processor (2 pumps)
- Visually inspect for damage to springs, bolts, shafts, pulleys, wiring, oil lines, etc.

## 3) 250 Hours

- Swing back processor and visually inspect rolls, roll gap, and the overall condition of the processor.
- If roll gap is wider at one end, there is also a possibility that the rolls just need to be adjusted.
- Grease lower idle pulley on processor (2 pumps)

## 4) End of Season (VERY IMPORTANT)

- End of season maintenance will help reduce bearing failures and greatly reduce down time while harvesting.
- Use air to clean off the Processor.

and following the next few steps.



- If you decide to power wash the processor, **immediately dry the processor and open it to expose bearing housings and rolls after power washing,** there is a good possibility that water penetrated the seals of the bearing and bearing damage would be imminent. After power washing the processor, you can prevent bearing damage by immediately servicing the processor and following the next few steps.
- Remove the tops of the bearing housings with a soft mallet and inspect the condition of the oil and bearing. Be very careful with the mating surfaces of the bearing housings since they are machined surfaces and keep the top half with the bottom half since they are machined as a mating pair and are numbered accordingly.
- If there is no contamination, clean bearing housings and replace the felt seals (HPR1009). See “End of Year Roll Maintenance” section.
- If contamination is present, the bearing casting needs to be removed and cleaned thoroughly. The oil line and the temp sender should be removed in order to clean the casting. New felt can then be installed. The bearing may also need to be replaced if there is a substantial amount of contamination in the bearing casting. An inspection of the bearing rollers may also help determine if the bearing needs to be replaced.
- Make sure all bearings get fresh “John Deere Kernel Processor Oil” (TY27729) after they have been inspected or changed. See section “End of Year Roll Maintenance”.
- Rolls should be covered with a rust inhibitor to prevent corrosion. Corrosion on rolls may cause rolls to be out of tolerance, leading to vibration.

## **ScherMist®**

Replace ScherMist® head gaskets (Kit OM1026) (See Part ScherMist® Head Rebuild section)

## **Recommended End of Year Parts Replacements**

HPD1411.1 - 1x - Coalescing Filter and O-ring Kit.

HPR1009 - 12 - Bearing Felt Seals

OM1026 - 1x - ScherMist® Gasket Kit

NBB2005 - 2x - Frame Seal

NBT1001 - 1x Connection Seal

JDTM1001 & JDTM1002 - Top Cheek Plates

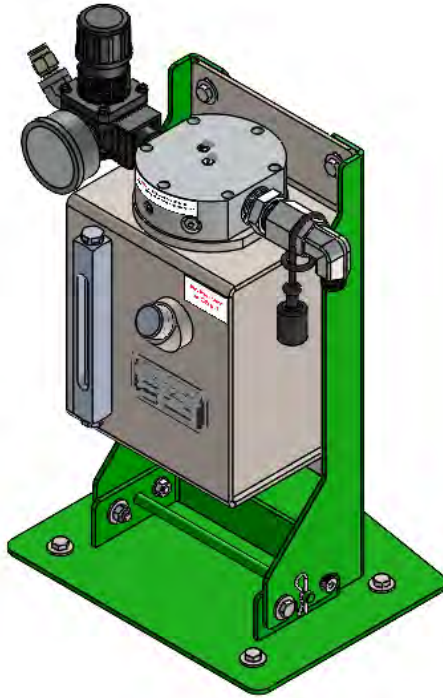
JDBM1001 & JDBM1004 - Bottom Cheek Plates







# Schermist® Maintenance



- Make sure to maintain an air pressure of 35psi at the Schermist® regulator.
- Oil fill is the plug located on the front of the Schermist® reservoir.
- Fill with oil until the oil level matches the full mark on the sight glass.

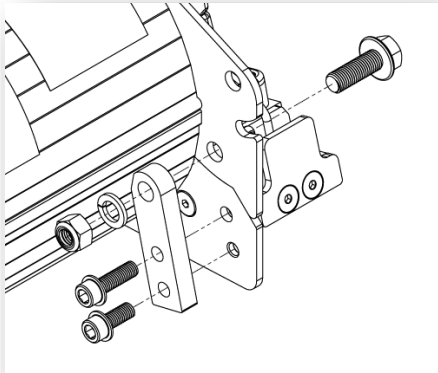
**DO NOT OVERFILL!! SCHERMIST® WILL NOT FUNCTION PROPERLY IF IT IS FILLED ABOVE THE FULL MARK!!**

- Use “John Deere Kernel Processor Oil” part number TY27729.
- In very wet corn conditions, we recommend changing the oil in the bearings every two weeks and at the end of the season. To change the oil, remove the most convenient plug and drain. Refill the bearing housing with 15 cm<sup>3</sup> of fresh oil.
- **At the end of season, remove all water from regulator and air lines to prevent damage from freezing.**
- When removing the kernel processor, disconnect the hose from the kernel processor and use the cap to prevent dirt from entering the manifold. Also cap off the KP connection hose and turn off the air supply to the Schermist®.

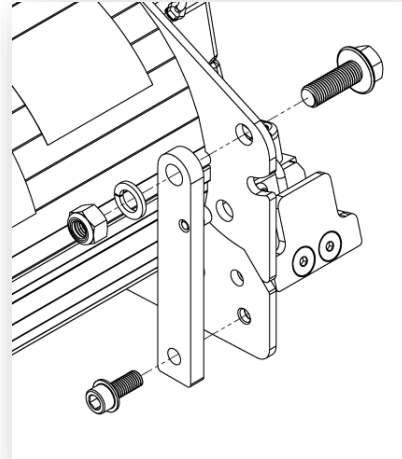
**THE SCHERMIST® SYSTEM SHOULD NOT BE PRESSURIZED IF THE KP CONNECTION HOSE IS CAPPED OFF**



# Processor Opening Process



**Step 4:** Remove the idle operating strap . Do not remove both at once.



**Step 5:** Install service hinges using hardware from operating strap . Do not fully torque hardware. Repeat steps 4 & 5 for drive side.

**Step 3:** Remove latch block bolts and nuts

**Step 7:** Lift on the handle to open top

**NOTE:** Take note of the shim orientation behind the idle pulley when removing

**Step 1:** Remove the idle pulley assembly

**Step 2:** Remove the bolts behind the idle shaft

**Step 6:** Remove oil lines from front roll and bearing deck., also unplug all sensors. Cover hose ends from debris and protect hoses from pinch points.

**IMPORTANT:** SEE IDLE PULLEY INSTALLATION INSTRUCTIONS PAGE BEFORE REINSTALLATION

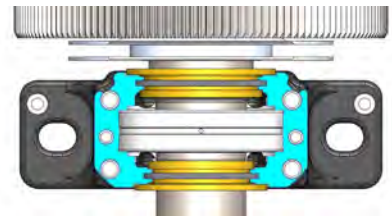


# Roll Change Instructions

1. Remove processor from the forage harvester. An air wand will also help keep things clean and free from debris.
2. Clean the bolt heads of the locking hub and remove the pulley from the roll that needs to be replaced.
3. Open KP as per instructions in section “Processor Opening Process”
4. Remove pulley from rolls to be replaced. See “Locking Hub Installation” page for removal instructions.
5. Remove bearing housing bolts (BLT10052) and alignment bolts (BLT10015)
6. Remove roll from frame

## No Housing Roll Installation

1. Remove four bearing housing bolts (BLT10000)
2. Split the housings. Tap on the feet of the lower housing with a soft mallet to separate the two halves. Note what housing the top was removed from. Top and bottom housings are a matching pair and are not interchangeable.
3. Remove the old fiber oil seals and clean the housings.
4. Install new fiber oil seals per instructions provided with the rolls.
5. Add .50oz (15ml) oil (Part # TY27729) to bottom bearing housing and reinstall the housings.
6. Reinstall housing bolts (BLT10000) and torque to 65 ft-lbs (88Nm)
7. Spin the bearing housing and inspect the brass seals. If the brass moves with the bearing housing, inspect the placement of the brass seal. Do not install if the brass does not rotate with the roll.



## Install New Roll

1. Install new roll using bearing housing shear bolts (BLT10015 apply anti-seize) torque - 12 ft-lbs. (16 Nm) to align the bearing housings. The drive side bearing housing will be locked in place. Install the idle side bolts first, then pull the roll to a position to allow the drive side bolts to be installed. The idle side bearing will slide within the bearing housings to allow proper alignment.
2. Install the bearing housing bolts (BLT10052 apply anti-seize) torque - 160 ft-lbs. (217 Nm).
3. Close the processor. Reverse steps from section “Processor Opening Process”. Watch oil lines and wires so they don’t get pinched between the two KP halves of the frame.





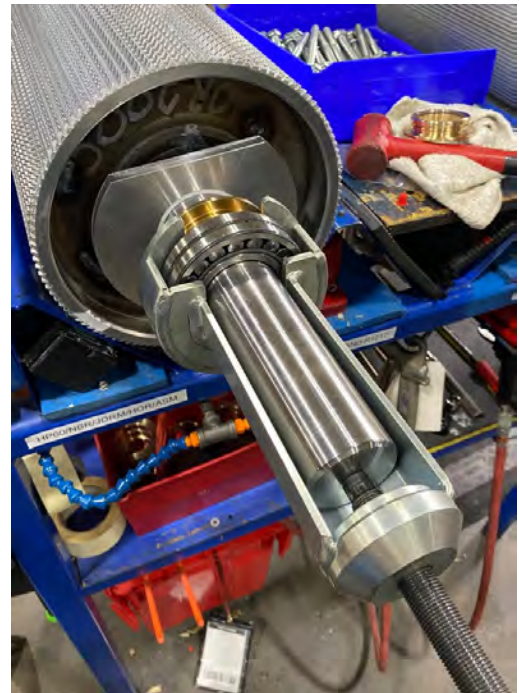
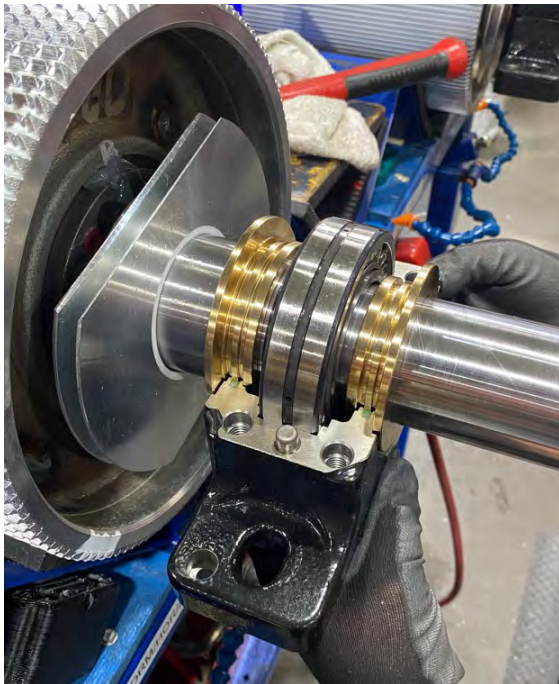
# Roll Bearing Removal and Installation

1. To remove the roll bearing, the housing must be disassembled. Remove the 4 bolts on top of the housings. Tap on the feet of the lower housing with a soft mallet to separate the two halves.

**\*NOTE\*: Housings are machined as matched sets. The two halves are engraved to show parity.**



2. Remove the outer brass seal and then use the bearing removal tool (A0022) to remove the bearing.





2. Remove inner brass housing seal and aluminum spool seal. Clean and inspect. Replace if any components show improper wear. Make sure to install the brass housing seal dry. **NO LUBRICANT**



3. Using the bearing heater (A0021) heat the bearing to 230 degrees F (110 degrees C). Using proper PPE (Personal Protective Equipment) take the bearing and slide it onto the shaft until it hits the machined step. If the bearing gets jammed, pull the bearing off again with the removal tool (A0022) and re-heat the bearing and install again. Reassemble the bearing housing and torque the housings bolts to 65 Ft-lbs (88Nm).





# Roll Gap Adjustment

Once the processor is installed in the cutter and some product has been run through it, you may need to adjust the roll gap. To do this, you will use the adjustment tool provided. Take the locking pin out of the wrench bracket assembly. Rotate the bolt clockwise to open the gap, and counter-clockwise to close the gap. Return the adjustment tool to its original position. **The adjustment tool is also a lock for the roll position.** You will not be able to adjust the rolls closer than 0.5 mm (.02") because of the factory setting of the roll stops (prevents the rolls from hitting). **The processor is not intended to be run with the slide blocks against the roll stops.** When adjusting, watch pointer move across scale. Use the scale to determine your roll gap. The scale is marked at 1, 2 & 3mm and is set from the factory at 2mm. After you have a number of hours on your processor you may need to adjust your rolls together to compensate for wear. After a number of adjustments, and the pointer moves onto or near the red marks on scale, the adjustment bolts may become free from tension. If you still need to close your roll gap further, you may have to clean behind the bearing slide plates and adjust roll stop bolts to allow for more movement.



# Common Torque Specs

LATCH BLOCK MOUNTING HEX BOLT (BLT10008)	28 Ft-lbs.	38 Nm
LATCH BLOCK MOUNTING SHCS BOLT (BLT10009)	47 Ft-lbs.	63 Nm
TOP HINGE BOLT (BLT10016)	121 Ft-lbs.	164 Nm
BOTTOM HINGE BOLTS (BLT10100)	81 Ft-lbs.	110 Nm
SPRING ROD BOLT (D1326) *EXCLUDES IDLE PULLEY	173 Ft-lbs.	235 Nm
BEARING HOUSING SHEAR BOLT (BLT10015)	12 Ft-lbs.	16 Nm
BEARING HOUSING MOUNTING BOLT (BLT10052)	160 Ft-lbs.	217 Nm
LIFT HANDLE BOLT (BLT10013)	28 Ft-lbs.	38 Nm
SLIDE CAP BOLTS (BLT10023)	49 Ft-lbs.	66 Nm
SLIDE CAP BOLTS (BLT10025)	24 Ft-lbs.	32 Nm
SLIDE GUSSET BOLTS (BLT10007)	40 Ft-lbs.	54 Nm
SPRING ROD (JDTM1003)	330 Ft-lbs.	448 Nm
BEARING HOUSING BOLT (BLT10000)	65 Ft-lbs.	88 Nm
IDLE PULLEY BOLT (D1326)	90 Ft. lbs.	122 Nm
IDLE SHAFT BOLT (JDPM2003)	90 Ft. lbs.	122 Nm
INNER SLIDE MOUNTING BOLT (BLT10046)	62 Ft-lbs.	84 Nm
LATCH BLOCK NUT (NUT10001)	65 Ft-lbs.	88 Nm
TAPER LOCKING HUB—PULLEY (HOR1001)	30 Ft-lbs.	41 N-m
TAPER LOCKING HUB—ROLL (HOR1016)	61 Ft-lbs.	83 N-m

Apply Blue Loctite 242



Apply Red Loctite 271

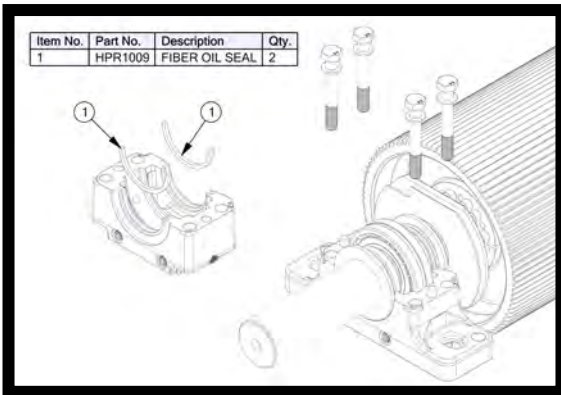


Apply Never Seize

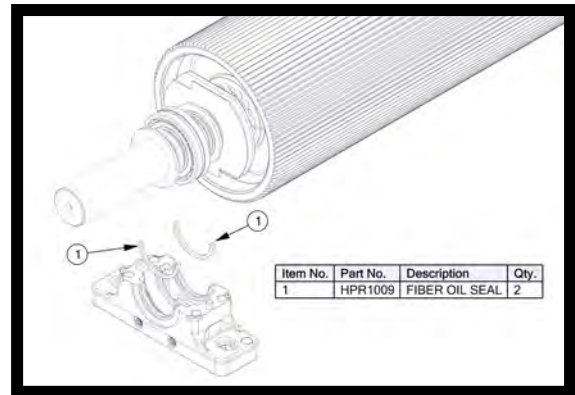




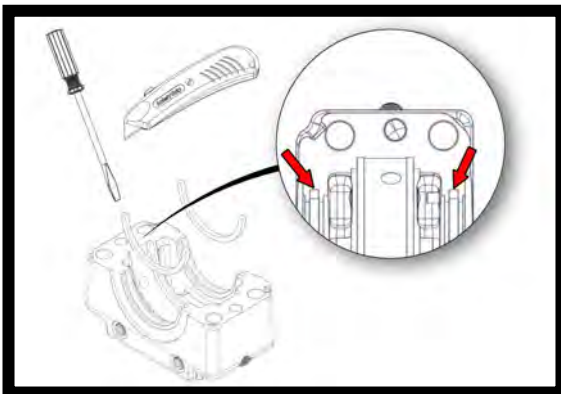
# End of Year Roll Maintenance



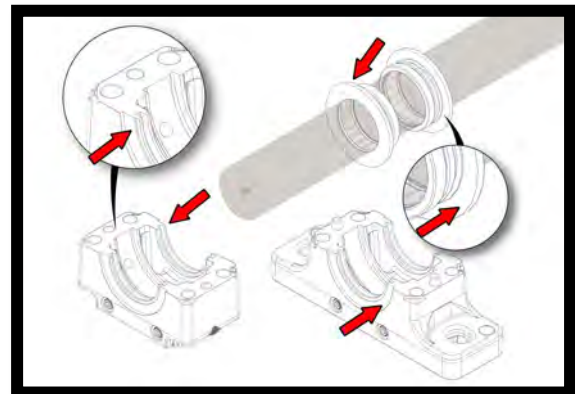
- Operation can be performed while roll is mounted in processor. Remove top bearing housing.
- Remove fiber oil seals “HPR1009” and replace.



- Lift roll from bottom bearing housing.
- Remove fiber oil seals “HPR1009” and replace.

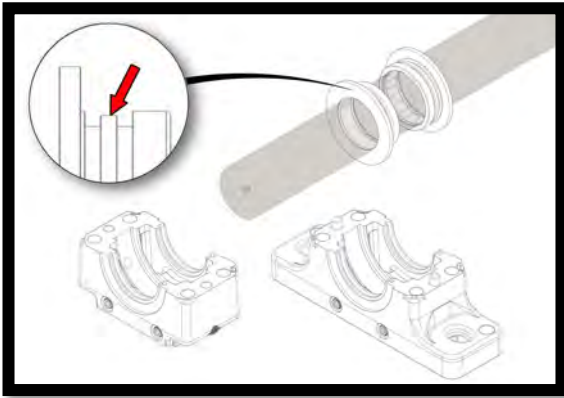


- Soak fiber seals in oil.
  - Press new felt into place with flat screw driver.
  - Green face orientation / contact with brass.
- Trim ends with utility knife.

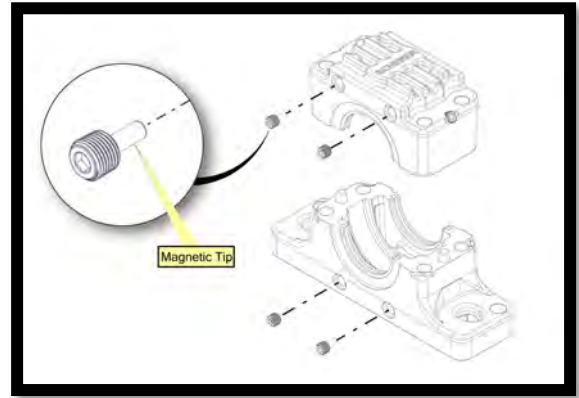


- Inspect surfaces between bearing housing and brass seal. If signs of excessive wear or galling, replace components.





- Inspect this surface on brass seals. If signs of excessive wear or galling, replace components.



- Some of the plugs on the side of the bearing housings have magnetic tips. These must be inspected for metal filings and cleaned.

**Flush and clean the inside bearing cavity as well as the roll shaft bearings**

**Reassemble bearing housings and fill with “John Deere Kernel Processor Oil” (Part #TY27729)  
.50oz (15ml)**

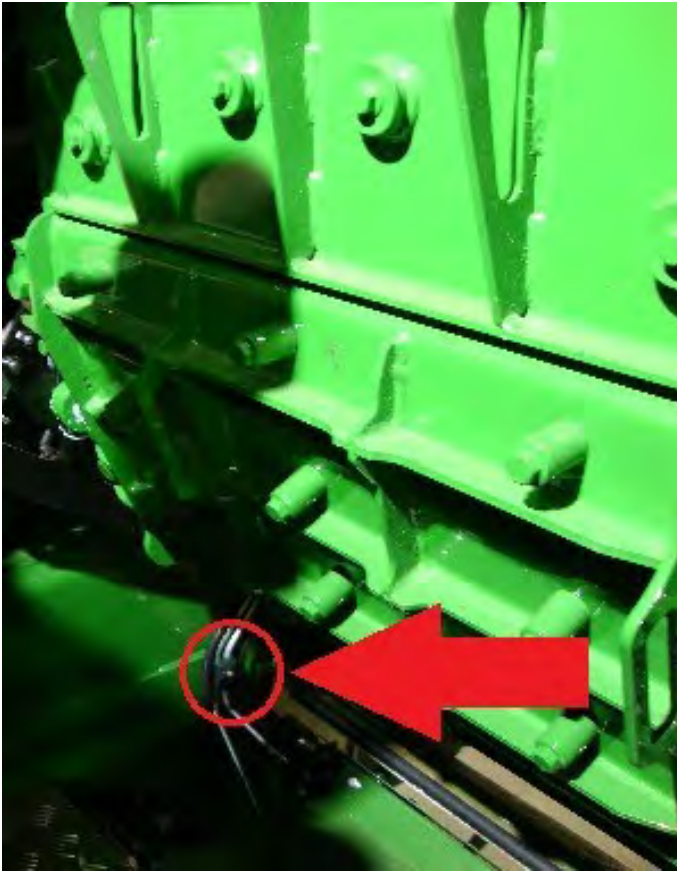
**Apply a thin coat of oil or some other rust inhibitor on both rolls to avoid corrosion.**



# Processor Installation

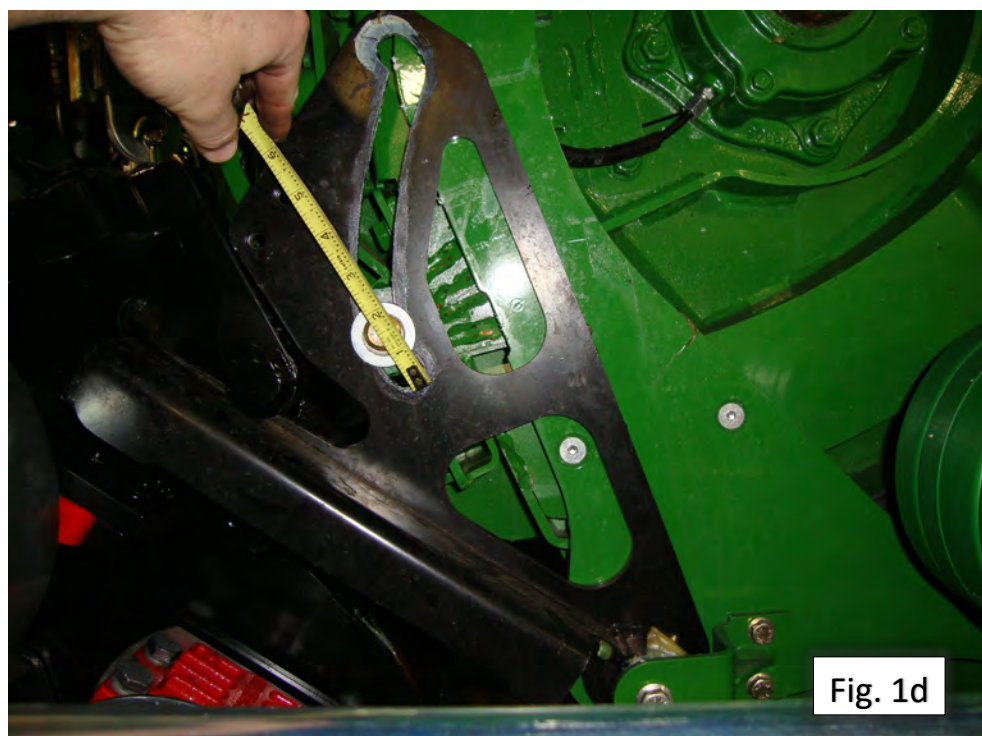
Before lifting the processor into place in the Self-Propelled Forage Harvester, ensure that the latch blocks are snug, and hinge bolts are tight. Always use the KP hoist on the SPFH to lift the processor in and out of the cutter. Never stand under the processor when it is lifted overhead.

Before lifting the KP into the carrier assembly. Locate the mounting clamp that holds the 2 hard lines that run along the left-hand side of the KP compartment. Remove the factory metal cover and bolt. Discard plate and replace bolt with part #19M8532 to reinstall clamp. See images below for proper installation.





For ease of installation, remove the cross-bar support that is bolted to the floor and to the discharge chute. (Fig 1b) (Fig 1c) Next crank the carrier assembly up, so that it's about 1inch (25mm) from being all the way up. (Fig 1c) This will make installation a lot easier. **(This position is best for removal as well)** Once you have the KP set in the carrier assembly, tighten the main mounting bolts with a 24mm socket. Bolt the "L" shaped brackets in at this time as well.





Crank the carrier assembly down into position, once it's all the way down, tighten the bolts on the side of the carrier to lock it in place. Ensure the latch blocks on the processor are tight. If you removed the crossbar, reinstall it at this time.

With the processor ahead and secured into the operating position, and the supplied accelerator pulley placed on the blower shaft. You can now align the accelerator pulley to the KP. Do this by using a laser alignment (A0011). Use of a laser alignment tool is highly recommended but laying a straight edge along the main drive pulley, and along the front processor pulley will also work. Tighten the accelerator pulley to factory specs. The pulleys on the KP will be set and torqued from the factory.

The roll gap was set at 2 mm and the scale has been marked at 1, 2 & 3mm. Unless the gap has been changed, the roll adjustment should not have to be changed until some product has been run through it.







# ScherMist® Bracket Assembly Instructions

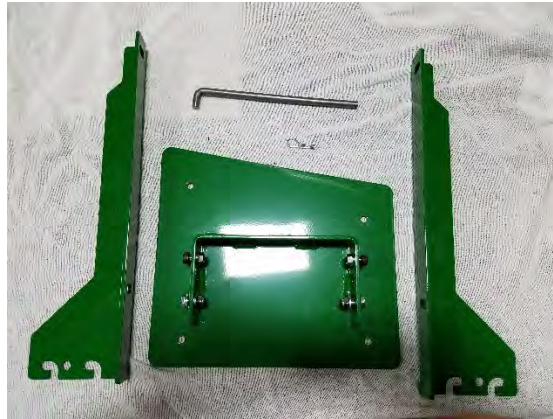


fig 1a

Open the mounting kit, and set the parts out in front of you as shown in fig 1a.



fig2a



fig2b



fig 2c

Take the left hand mounting arm, and slide it down and back over the two bolts. Repeat the process for the right-hand side. Fig 2a, fig 2b, fig 2c.





fig 3a



fig 3b



fig 3c

Next take the supplied locking pin, and insert it through the hole in between the 2 bolts on the base. Once it is all the way through, place the supplied hair pin in the end of the locking pin. Fig 3a, fig3b, fig 3c



fig 4a



fig 4b

Next take the ScherMist® assembly and supplied bolts in the kit, and mount it to the arms on the mounting bracket. Fig 4a, fig 4b



fig 5a

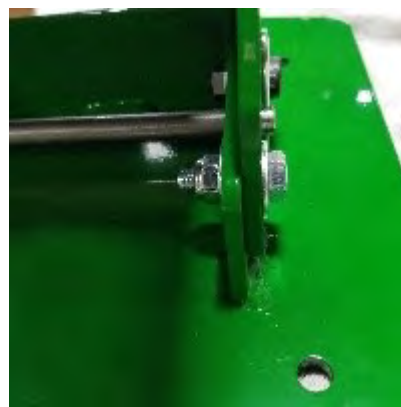


fig 5b

Once you have the ScherMist® assembly mounted to the arms, tighten the two bolts going through the front of the mounting arms. Fig 5a, fig 5b

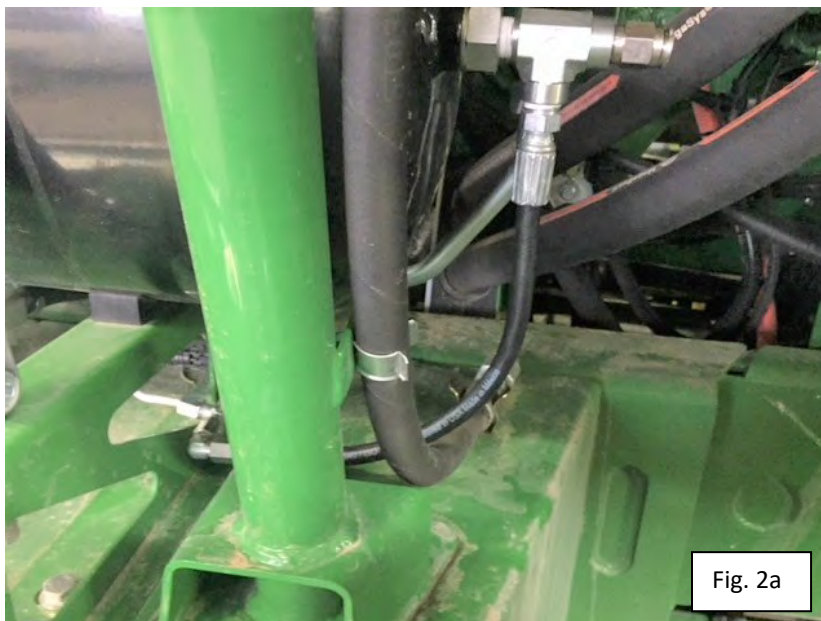
The ScherMist® assembly is now ready to be installed on the forage harvester.



# Pre-2018 Air Fitting Install



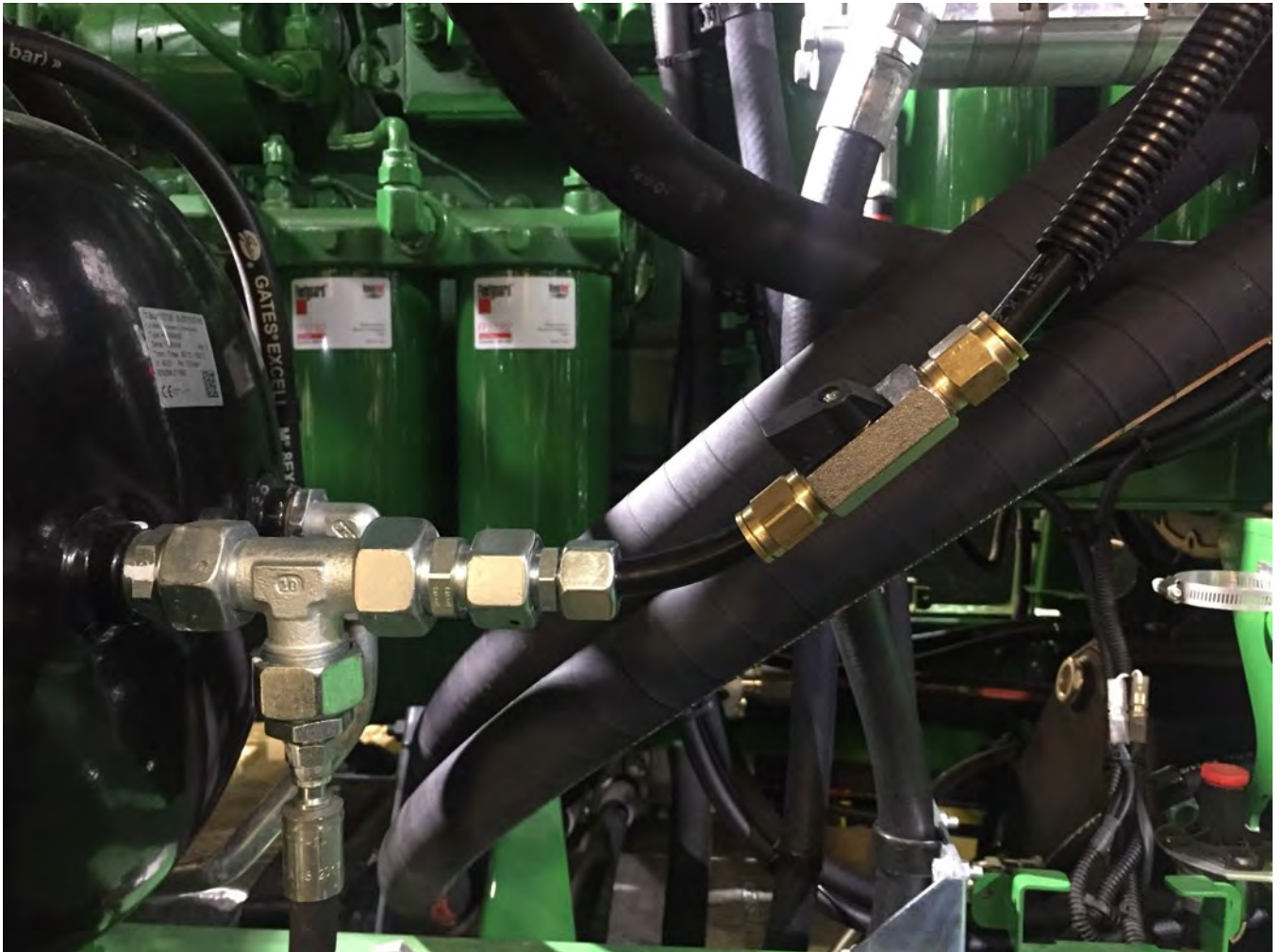
Take the supplied air kit fittings and hose thread tape all the connections to the tee fitting.



Remove factory line and install the fitting assembly on the air tank as shown in Fig. 2a.



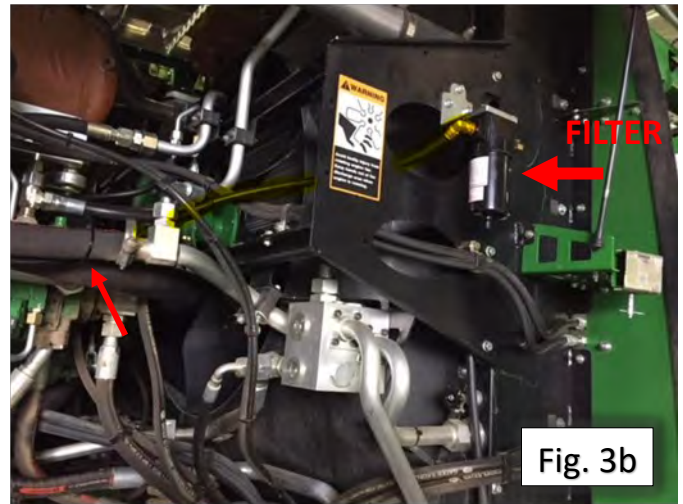
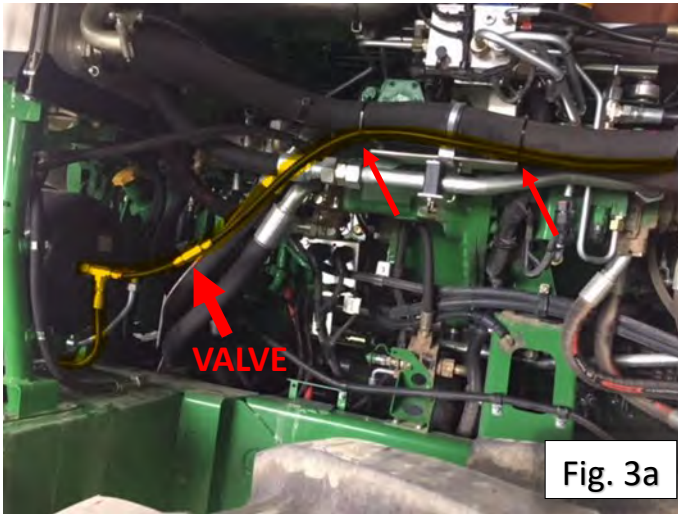
# 2018+ Model Year Air Fitting Install



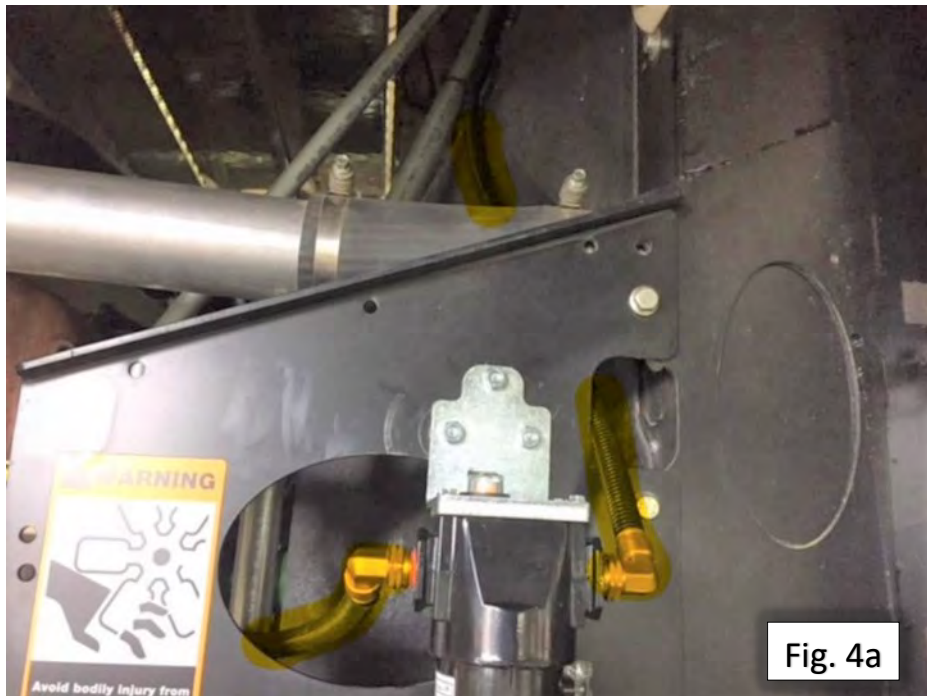
Remove the cap on the factory tee fitting and install the fitting assembly OM5011 on the air tank as shown above.



# Air Line Routing



Next take the supplied plastic air line and run a small piece from the push lock fitting off the front of the tank installing the  $\frac{1}{4}$  turn shut off valve right next to the air tank. See Fig. 3a. Next take the air line and route it along the hydraulic hoses in the engine compartment. **NOTE: Placement of  $\frac{1}{4}$  turn shut off valve is critical. Do not place valve in any other location than what is shown in image above.**



Take the coalescing filter assembly and drill 3 holes in the radiator fan mount as seen in Fig. 4a. Using the supplied hardware, mount the coalescing filter assembly here. Take the air line that was routed across the engine compartment, and plumb it into the coalescing filter. Note that on top of the filter, there is an arrow that indicates the direction of flow. Take the rest of the plastic air line coming out of the filter, feed it through the hole in the radiator fan mount. Route this line along the service bay as shown in Fig. 5a-5d. The **coalescing filter also has a water separator. This automatically drains itself periodically. The float will freeze and break if it is not drained at the end of season.**



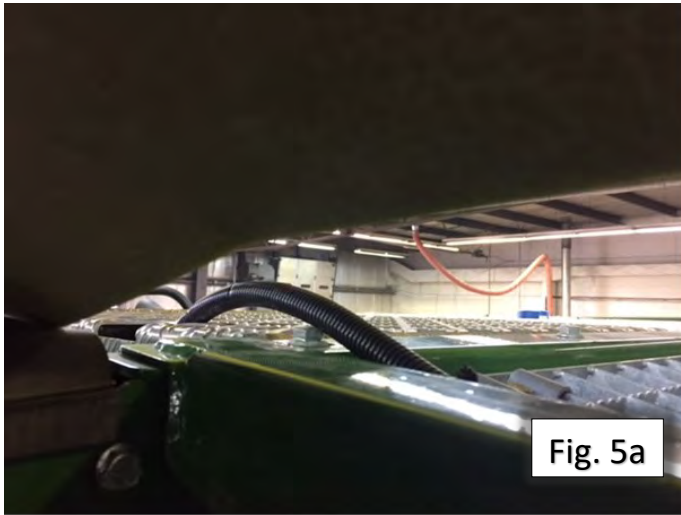


Fig. 5a



Fig. 5b



Fig. 5c

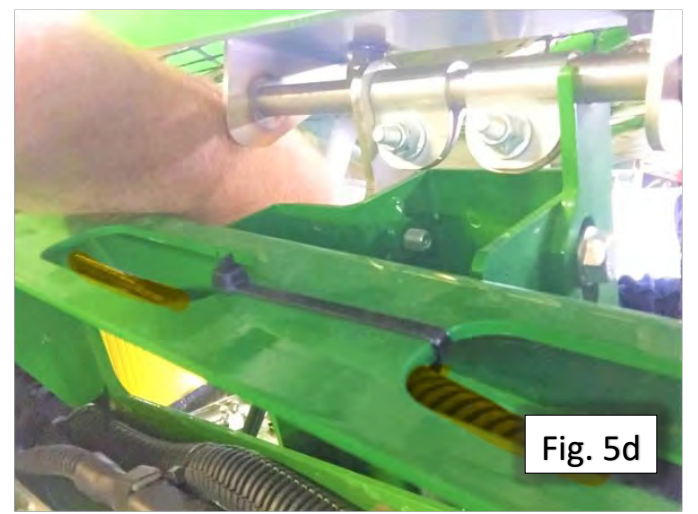


Fig. 5d

Route this line along the service bay as shown in Fig. 5a-5d.





Fig. 6a

The next step will be mounting the ScherMist® assembly on the right side of machine as shown in Fig. 6a. On the service platform drill 4 holes to accept the mounting bracket for the ScherMist®. Place it between the inoculant tank and door so there is no interference with hose routing. When drilling holes, avoid interferences with cross braces below the service platform. Use provided hardware to fasten ScherMist® mounting bracket to service platform. Drill the appropriate size holes in the panel behind the ScherMist® assembly for the air and oil line to pass through.





Next take the main oil line, and run it from the ScherMist® to the KP. Route the hose through the side panel and down to the KP as shown in Fig. 7a. Make sure oil line is clear of belt.

Remove plug from the front of the ScherMist® reservoir and fill with oil.

**DO NOT OVERFILL!!!!!!**

Overfilling will restrict the mist head and the system will not work properly.

Start the forage harvester engine and allow the air system to charge.

**If the system is working properly, you will see what appears to be smoke or fog coming from the bearing housings and the bearing slides.**

Set the ScherMist® regulator to 35 psi.





Next take the main oil line, and run it from the ScherMist® to the KP. Route the hose behind the protective plastic cover as shown in fig 6a.

**Remove plug from the front of the ScherMist® reservoir and fill with oil.**

**DO NOT OVERFILL!!!!**

**Overfilling will restrict the mist head and the system will not work properly.**

**Start the forage harvester engine and allow the air system to charge.**

**If the system is working properly, you will see what appears to be smoke or fog coming from the bearing housings and the bearing slides.**

**Set the ScherMist® regulator to 35 psi.**

**The regulator also has a water separator. This automatically drains itself periodically. The regulator will freeze and break if it is not drained at the end of season.**







# Sentry Install Instructions

Take the 4 bolts loose for the inoculant tank and unscrew the fitting for the line coming off the tank. Fig 1a, 1b



1a



1b

Take the 3 nuts out of the upper fairing and remove the fairing. Fig 2a, 2b



2a



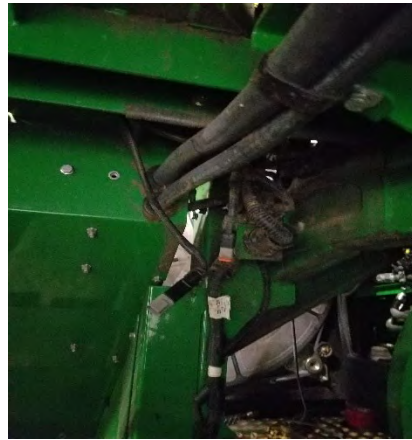
2b



Go underneath the right front fender. Take the inner panel off to access the plug for the inoculant tank and cut the 2 zip ties that are holding it up. Unplug the tank and feed it up through the hole in the fender. Take the tank off the fender. Fig 3a, 3b



3a

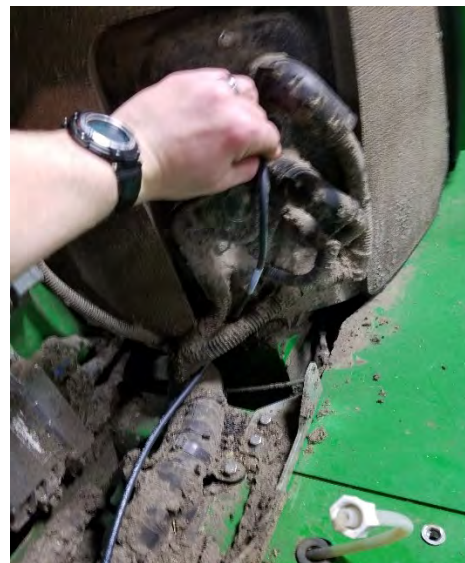


3b

Using a 3/4" hole saw, drill a hole in the back of the cab where the pass-through panel is for the wiring harnesses. Fig 4a, 4b



4a



4b

Go into the cab and remove the cup holder. Drill another 3/4" hole next to the cup holder. Fig 5a



5a



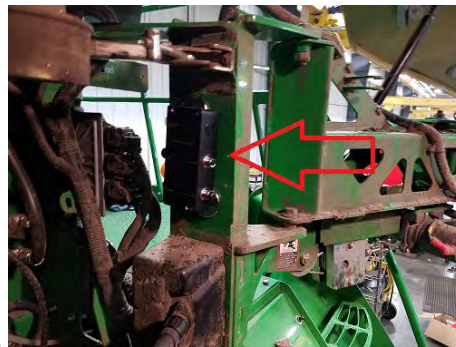
Find the multi box (PM21004). It has 2 magnets mounted to the back of it. Place it on the crane mount for the KP. Fig 6a, 6b, 6c



6a



6b



6c

Take the splitter "T" (PM21002) and place it down in the armrest, through the cup holder. Fig 7a



7a

Take the long cable (PM21006) and run it from the multi box to the "T" in the console, going through the 3/4" hole drilled in the pass-through panel. Zip tie the cable to the existing cab harness. Once you have the cable routed, take one of the supplied grommets and cut it. Wrap it around the cable and tuck it into the hole with a small screwdriver. Be sure to silicone on this grommet, to keep debris out of the cab. Fig 8a, 8b



8a



8b



Take the supplied ram mount and mount it on the rail in the cab. Take the monitor (PM21001) and socket arm (PM1006) and mount it in the cab. Take the other end of the "T" and route it through the hole drilled by the cup holder and plug it into the monitor. Take another grommet, cut it, wrap it around the cable and tuck it into the hole with a small screwdriver. Fig 9a

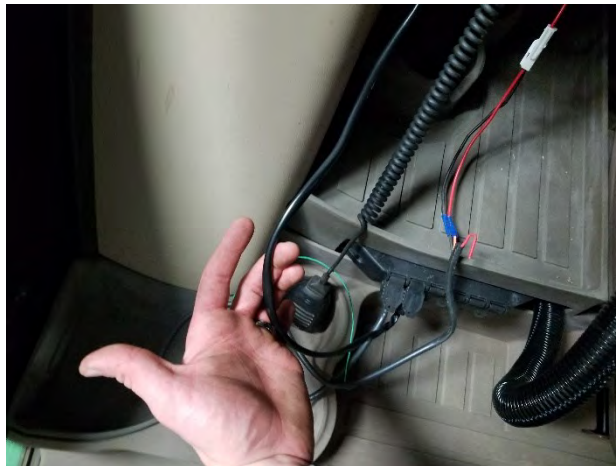


9a

Take the smaller 5 pin connector of the "T" and attach the JD power cord (PM3031). Run it underneath the console and plug it into the power strip. Fig 10a, 10b



10a

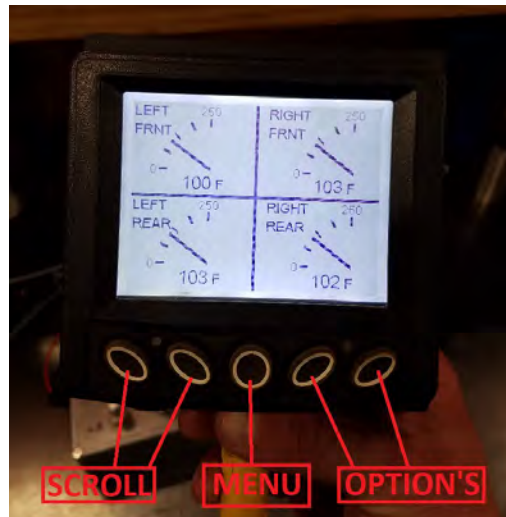


10b

Next take the PM3014 and run it from the multi-box to the KP, zip tying it out of the way from anything that'll damage the cable. Go into the cab. Turn the ignition and the monitor on. Ensure that you have 4 bearing temps being displayed. If not, double check all your connections.



# Scherer Sentry Operational Guidelines



- 1) The Sentry is set up to have 2 levels of alarm: warning and shutdown.
- 2) Warnings will only provide an amber light on the left corner of the display and an alarm screen with a description of the alarm. **Warnings** - bearing temps > 205° but < 225°F.
- 3) Shutdown alarms will provide an alarm screen with a description of the alarm, a red light at the bottom right corner of the display, and an audible alarm. **Shutdown** - bearing temps > 225°F.
- 4) To silence the audible alarm depress the button on the far right on the display. The audible alarm will be silenced for 5 minutes. If another alarm comes in during the 5 minutes you **will not** receive another audible alarm.
- 5) To clear the alarm screen so you can resume monitoring bearing temps press the 'HIDE' button on the display, far right.
- 6) Normal operating range (after break-in) is 120°-175°F.

**NOTE** – The sentry will display a description screen for every warning or alarm received even if the issue has been resolved. If neither the amber nor red light on the bottom of the Sentry is illuminated there is **no longer** an alarm situation. It makes you acknowledge the alarm screen so you know at one time there was an issue.



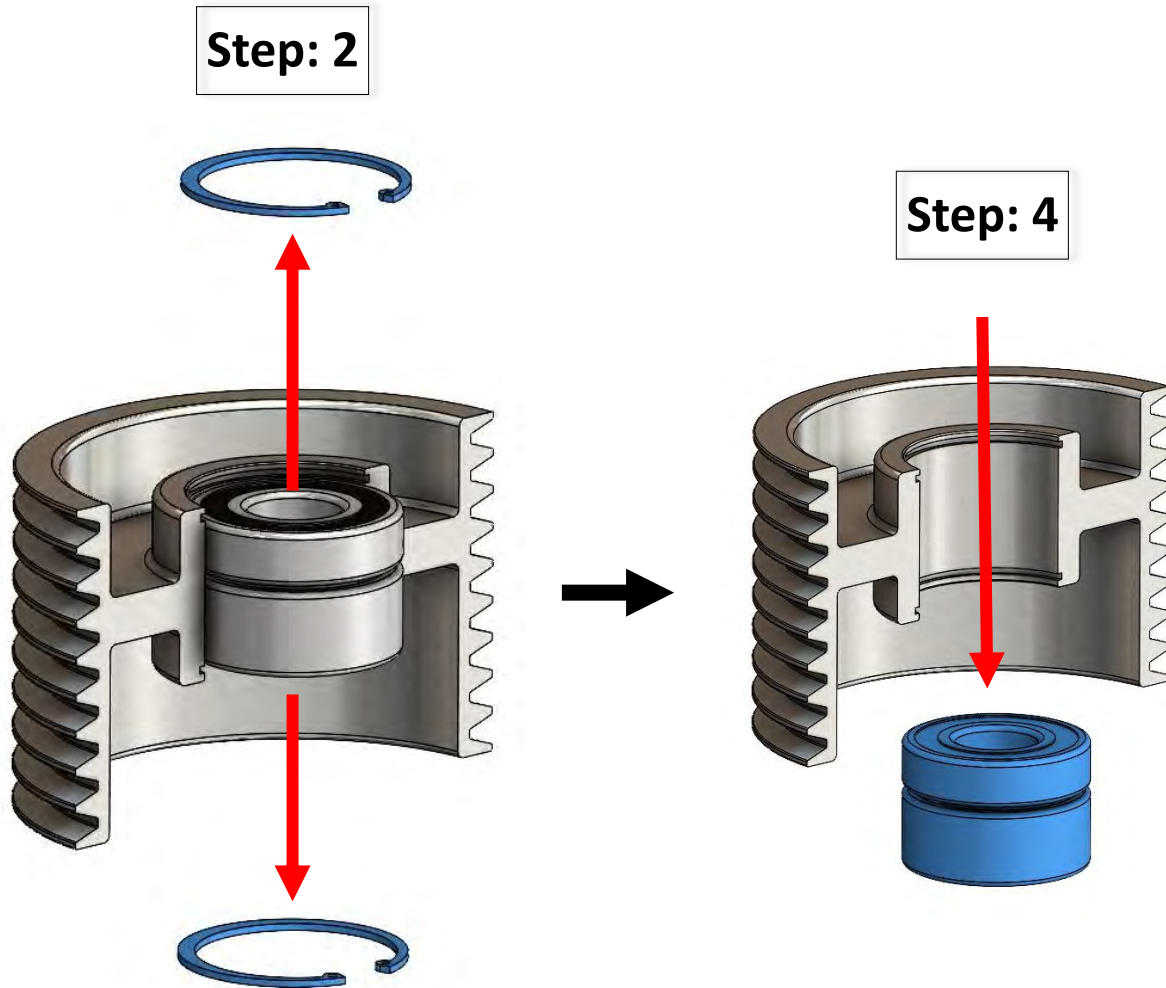
# Troubleshooting the Scherer Sentry

Issue	Cause	Solution
Some bearing temps are reading NO DATA	Wire harness has a loose connection	Make sure all threaded connections (inside firewall, outside firewall, at the processor, and after the splitter) are finger tight.
Running a new processor and the bearing temps are above normal operating temp	Bearings are breaking in	New processor bearings need to "break-in". Normal break-in temps may be up to 200°F. Within 30-40 hours bearing temps should return to normal operating range (120°-175°F).
Some bearing temps are reading NO DATA	Temp sender may be faulty, or temp is above 275°	Replace temp sender if faulty.
Display reads "0.00 H"	Display is set up as "1-up" display	Press 'Menu', scroll to highlight 'GO TO 4-UP DISPLAY', press 'Enter'
Display reads in Degrees F	Menu is set to English units	Press 'Menu', scroll down to highlight 'SELECT UNITS', press 'Enter', scroll to highlight your unit of measure, press 'Enter', press 'Menu' twice to return to 4-up display.



# Idle Pulley Bearing Removal

1. Remove and clean the pulley. (Take note to the shim number and orientation behind the pulley)
2. Remove both snap rings
3. Place the outside of the pulley down on a press
4. Using a press punch that pushes on the bearings outer race, press the bearings from the pulley.
5. Make sure not to lose the bearing shim w/oiling slots (HXE131235) when the bearings are pressed out and disposed of. This will need to be reused when the new bearings are installed.



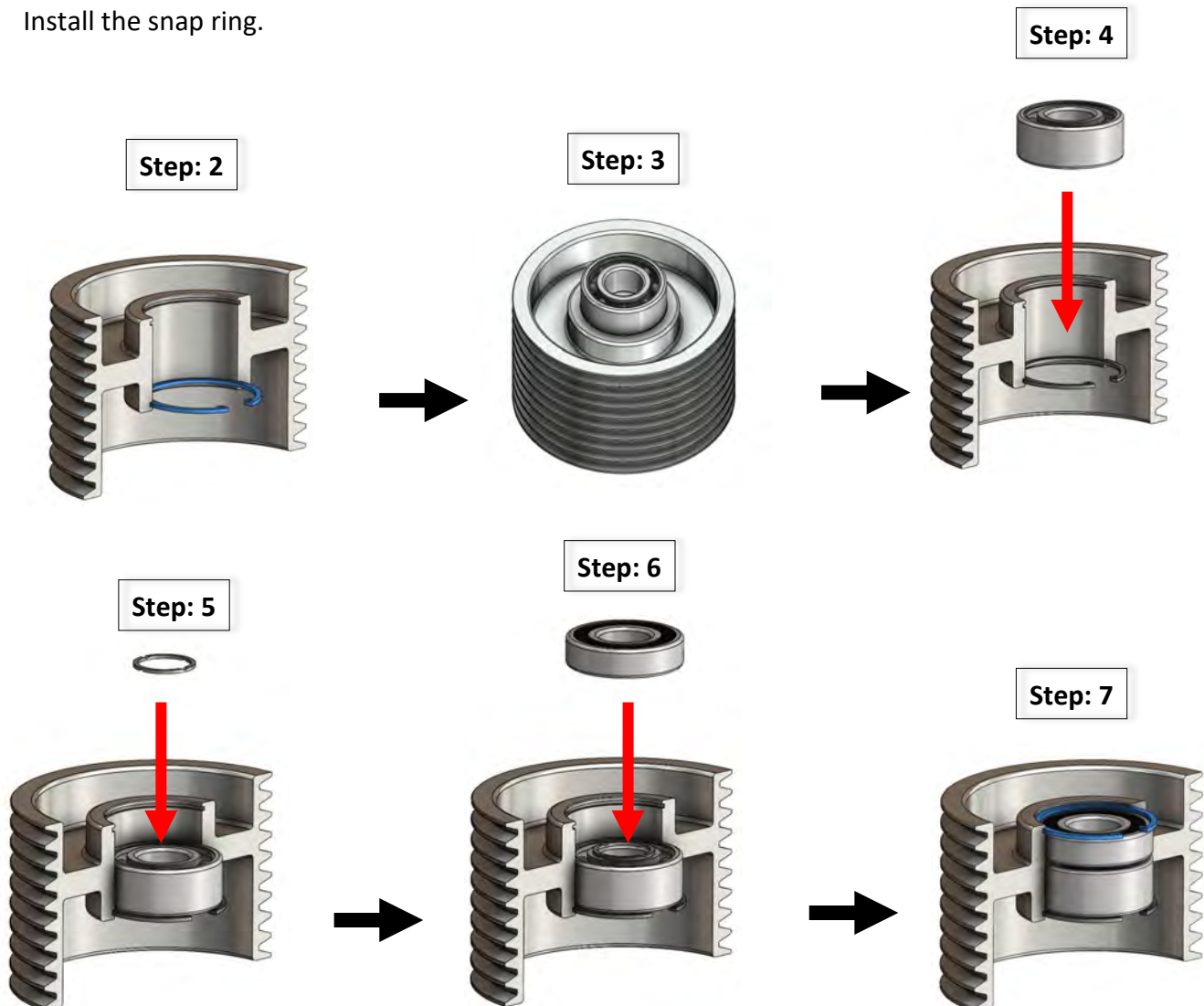


# Idle Pulley Bearing Installation

1. Using a clean rag, clean the bore of the pulley. Inspect the bore for any imperfections.
2. Install the snap ring on the large pocket side of the pulley.
3. Place the pulley on the press with the outside face of the pulley down. Place the wide bearing centered on top of the bore with the open side up.
4. Using a press punch that pushes on the bearings outer race, press the bearing into the pulley until it touches the installed snap ring.
5. Place the bearing shim w/oiling slots on top of the installed bearings inner race.
6. With the pulley in the same position, place the narrow bearing with the open side down on the pulley bore. Using the punch from the wide bearing, press the narrow bearing into the pulley until the second snap ring can be installed.

**NOTE:** The bearings should not get pressed together. Both bearings should be against the snap rings and the shim between the bearings should be allowed to float freely.

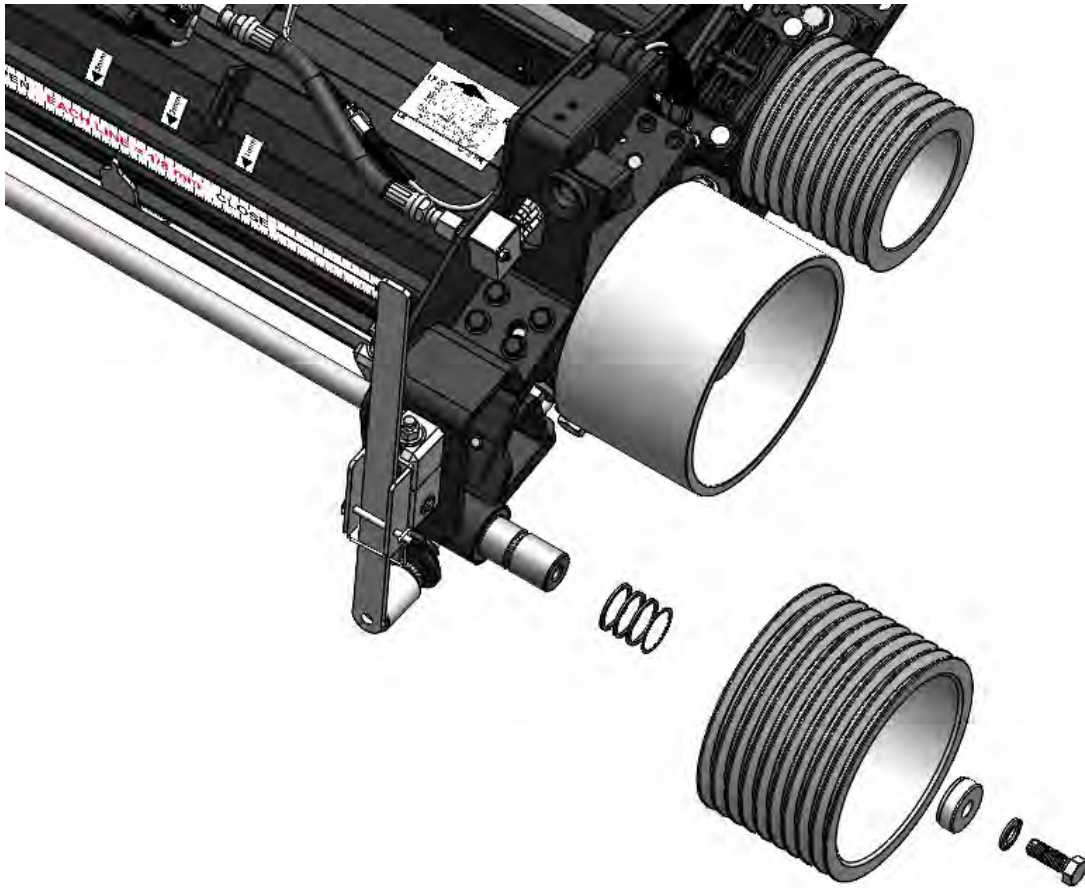
7. Install the snap ring.





# Idle Pulley Installation

1. Using a clean rag, clean the shaft of any dirt or deposits. If a new shaft is installed, fill the shaft with grease before installing the pulley.
2. Install the spacer shims onto the shaft.
3. Slide the pulley onto the shaft. Getting the pulley started onto the shaft sometimes requires wiggling of the pulley side-to-side. The pulley should slide freely onto the shaft after about an 1/8" of engagement.
4. Torque the bolt to 90ft/lbs (**VERY CRITICAL**)
5. **IN PRE MY22 PROCESSORS USING GREASE BEARINGS DO NOT ADD ADDITIONAL GREASE AFTER INSTALLATION**





# Idle Pulley Shaft Removal & Installation



fig 1a



fig 1b

Remove the bolt and the spacer from idle pulley. (fig 1a) (fig 1b)

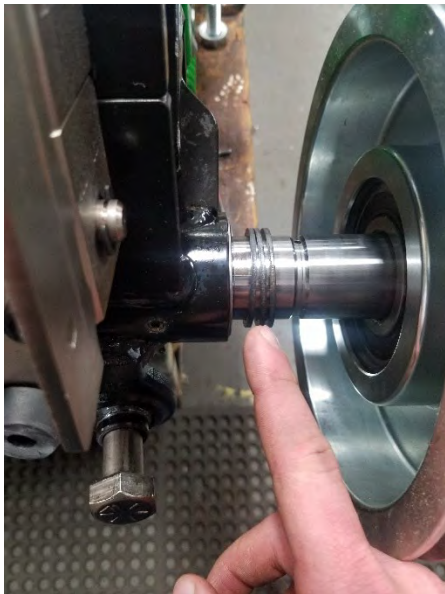


fig 2a



fig2b

Next slide the idle pulley assembly off the shaft, be careful not to lose any of the 3 spacers behind the pulley. Once the pulley is off, you can go ahead and remove the bolt and spacer on the backside of the idler shaft. (fig 2a) (fig 2b)





fig 3a



fig 3b

Next using a 4MM hex drive wrench, remove the 2 set screws. (fig 3a) (fig 3b)



fig 4a



fig 4b

Take a longer M16-2.0 metric bolt and thread it all the way into the shaft. Use a hammer, and drive the shaft out of the frame assembly. (fig 4a) (fig 4b)



fig 5a

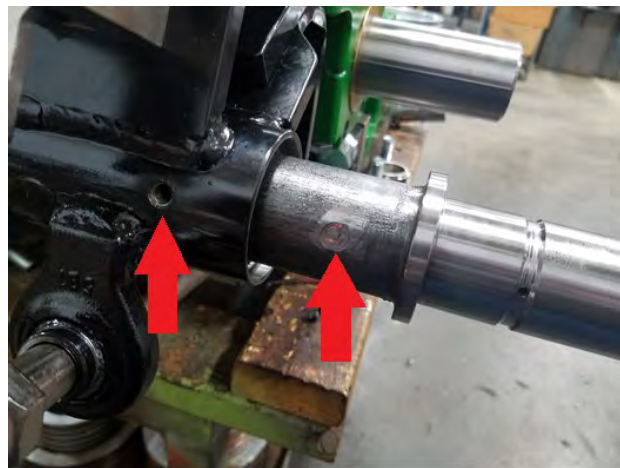


fig 5b



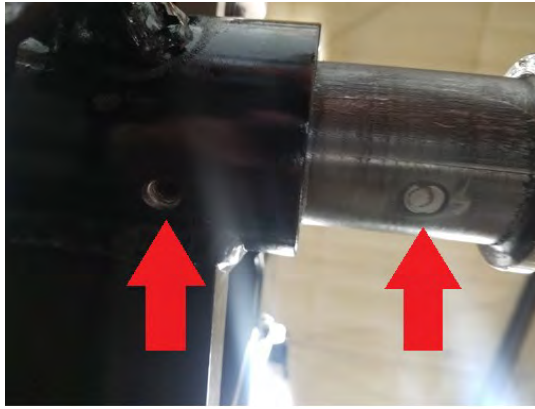


fig 5c

Take the new idle shaft, and cover it with anti-seize. Place it into the idle shaft receiver on the frame. Make sure to line up the set screw holes with the flats machined on the shaft. (fig 5a) (fig 5b) (fig 5c)

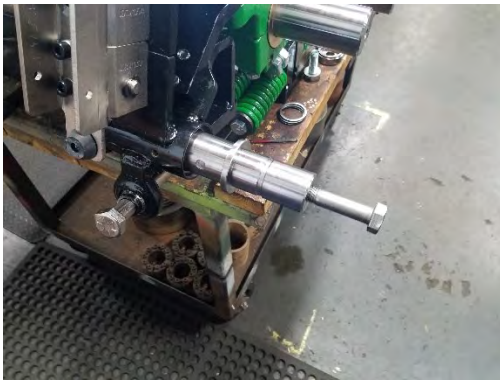


fig 6a

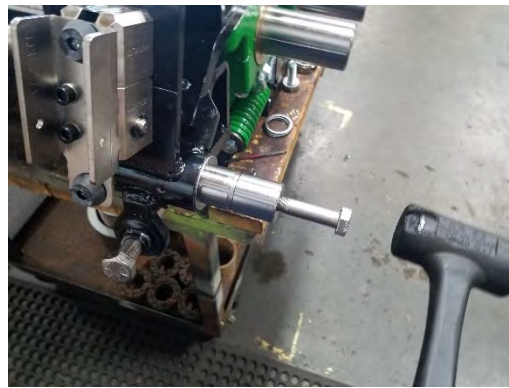


fig 6b

Use the same bolt that was used to remove the shaft, and thread it all the way into the idle shaft. Using a hammer, drive the shaft all the way into the receiver, making sure that the set screw holes and the flats on the shaft stay lined up. (fig 6a) (fig 6b)



fig 7a

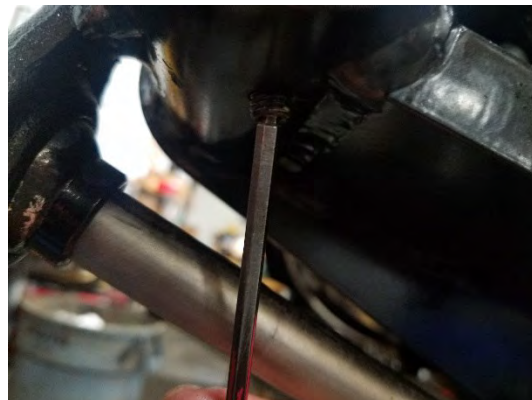


fig 7b

Take the set screws, apply red thread locker, and reinstall into idle shaft receiver. (fig 7a) (fig 7b)





fig 8a



fig 8b

Reinstall the bolt and spacer on the inside of the shaft, and torque to 90 ft-lbs or 122 N-m. (fig 8a) (fig 8b)



fig 9a



fig 9b

Install the 3 spacers on the shaft.

**\*\*IN GREASE APPLICATIONS ONLY (PRE-MY22 PROCESSORS):** Now take the bolt and spacer that's used to hold the pulley on. Thread the bolt all the way into the shaft, take a grease gun and pump grease into it until it starts to come out of the shaft. Remove the bolt and spacer when finished (fig 9a) (fig 9b)\*\*





fig 10a



fig 10b

Take the idle pulley assembly, and slide it onto the shaft. Reinstall the bolt and spacer, torque the bolt to 90 ft-lbs or 122 N-m. (fig 10a) (fig 10b)







**B-LOC®** Keyless Bushings provide a high capacity, zero-backlash shaft/hub or coupling connection by means of a mechanical interference fit. Please follow these **INSTALLATION AND REMOVAL INSTRUCTIONS** carefully to ensure proper performance of this **B-LOC®** unit.

### WARNING

When installing or removing B-LOC® products, always adhere to the following safety standards:

1. Be sure that the system is de-energized using proper lockout/tagout procedures
2. Wear proper personal protective equipment.

### INSTALLATION

(Refer to Figure 1)

**B-LOC®** Series B103 and B106 Keyless Bushings are supplied lightly oiled and ready for installation. They are self-centering and fit straight-thru hub bores. Note that Series B103 units permit axial hub movement during installation. In contrast, the extended flange on Series B106 units results in an axially fixed hub position during assembly. When reinstalling a used unit, make sure that all slits are aligned. The frictional torque capacity of these devices is based on a coefficient of friction of 0.12 for lightly oiled screw, taper, shaft and bore contact areas.

**Therefore, it is important *not* to use Molybdenum Disulfide (e.g., Molykote, Never-Seeze or similar lubricants) in any Keyless Bushing Installation.**

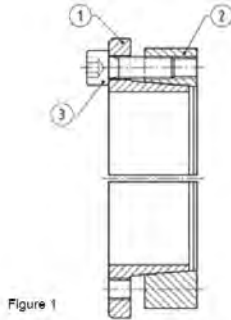


Figure 1

1. Make sure that locking screw, taper, shaft and bore contact areas are clean and lightly oiled with a light machine oil and that all collar slits are aligned.
2. Loosen all locking screws by a minimum of four (4) turns and transfer at least three (3) screws into push-off threads in order to keep Parts 1 and 2 separated during assembly (see Figure 2).
3. After inserting Keyless Bushing into hub bore, relocate locking screws used for separating Parts 1 and 2.
4. Hand tighten locking screws and confirm that collar Item 1 is parallel and in full contact with face of part to be attached to shaft.
5. Use torque wrench and set it approximately 5% higher than specified tightening torque (Ma). Tighten locking screws in either a clockwise or counterclockwise sequence (it is not necessary to tighten in a diametrically opposite pattern), using only 1/4 (i.e., 90°) turns for several passes until 1/4 turns can no longer be achieved.
6. Continue to apply over torque for 1 to 2 more passes. This is required to compensate for a system-related relaxation of locking screws since tightening of a given screw will always relax adjacent screws. Without over torquing, an infinite number of passes would be needed to reach specified tightening torque.
7. Reset torque wrench to specified torque (Ma) and check all locking screws. No screw should turn at this point, otherwise repeat Steps 6 and 7.

**NOTE: 1.** It is not necessary to re-check tightening torque after equipment has been in operation.

2. The torque capacity of these units can be increased by approximately 25% by thoroughly cleaning the shaft and Keyless Bushing bore of any lubricant. In applications subject to extreme corrosion, the slits in all collars should be sealed with a suitable caulking compound or equivalent. Likewise, push-off threads should be protected from corrosion.

### INSTALLATION OF B-LOC® KEYLESS BUSHING OVER SHAFT KEYWAYS

The Keyless Bushing should be positioned so that slits in Keyless Bushing collars that contact the shaft are located approximately opposite the keyway. In addition, a locking screw should be centered directly over the keyway.

When tightening locking screws, it is important to follow the installation procedure outlined above, which specifies equal 1/4 turns of each locking screw. Failure to follow these instructions could result in excessive tightening of the screw over the keyway, possibly causing permanent deformation of the Keyless Bushing collars.

### REMOVAL

(Refer to Figure 2)

**Prior to initiating the following removal procedure, check to**

**ensure that no torque or thrust loads are acting on the Keyless Bushing, shaft or any mounted compo-**

**IMPORTANT!** Make sure ends of locking screws used for removal are ground flat and are slightly chamfered to prevent damage to screw and collar threads during push-off.

1. Check to ensure that axial movement of collars - necessary for release of connection - is not restricted. Likewise, ensure that push-off threads are in good condition.
2. Relax all locking screws by approx. four (4) complete turns and transfer screws to all push-off threads located in flange of collar Item 1.
3. Release connection by evenly tightening all push-off screws (not exceeding 1/4 turns) in a diametrically opposite sequence.

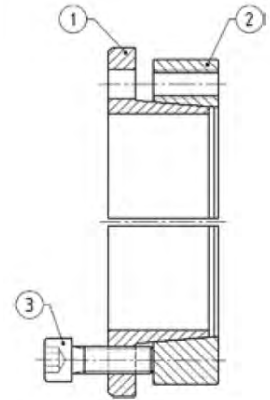


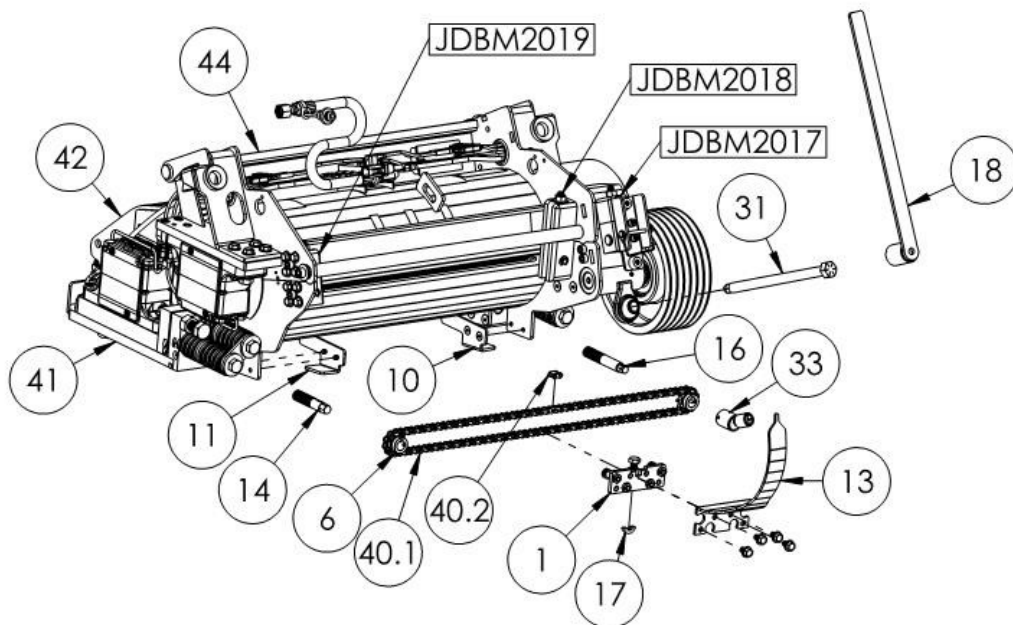
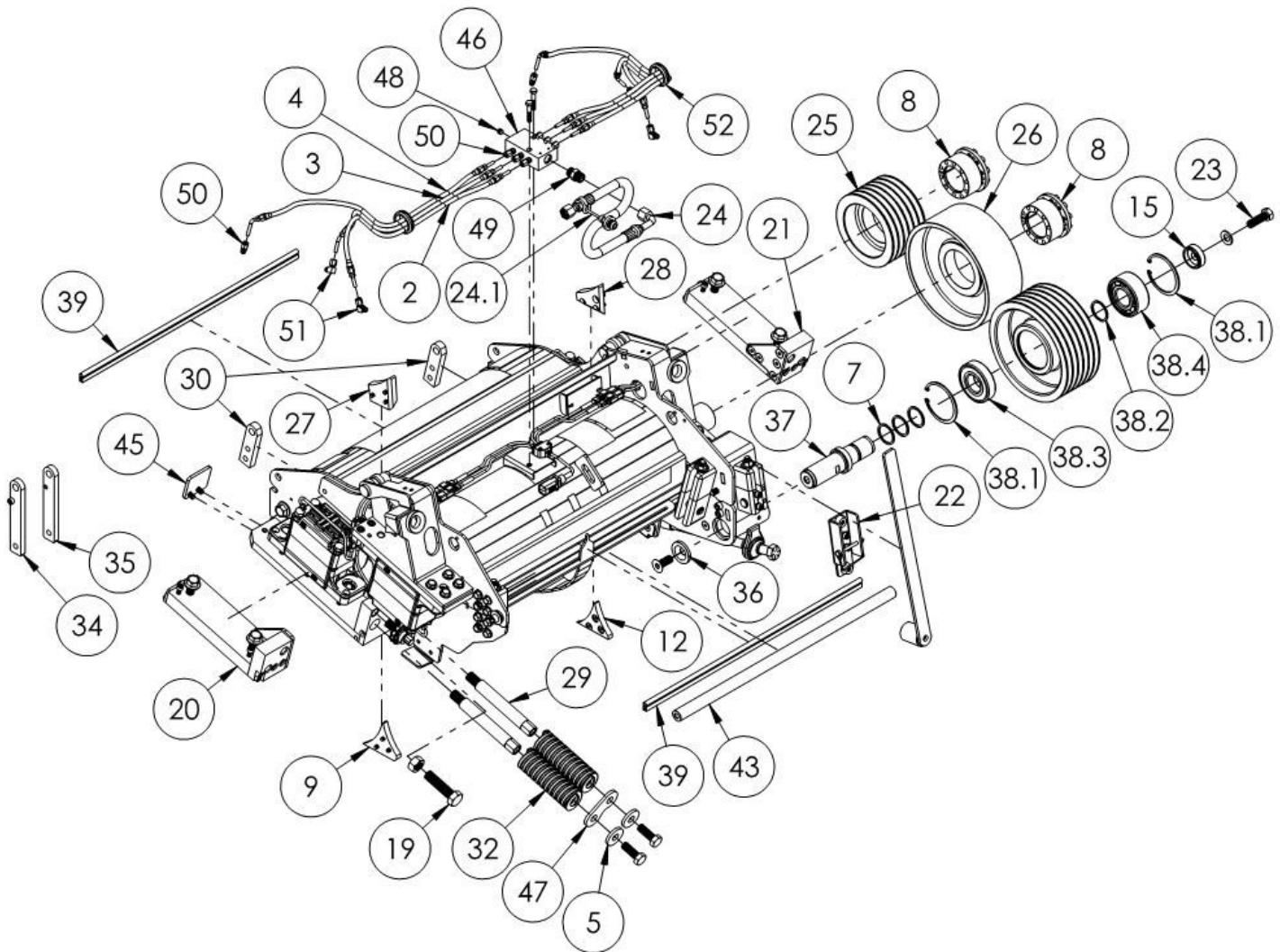
Figure 2

### LOCKING SCREW SIZES AND SPECIFIED TIGHTENING TORQUE Ma

Metric Series	Inch Series	Tightening Torque Ma (ft lb)		Screw Size	Hex Key Size (mm)
		B106	B103		
20 x 47 to 40 x 65	3/4 to 1-1/2	12	10	M6	5
45 x 75 to 65 x 95	1-5/8 to 2-9/16	30	25	M8	6
70 x 110 to 95 x 135	2-11/16 to 3-3/4	60	50	M10	8
100 x 145 to 120 x 165	3-15/16 to 4-3/4	105	90	M12	10
130 x 180 to 200 x 260	4-15/16 to 8	166	135	M14	12
220 x 285 to 260 x 325		257	219	M16	14
280 x 355 to 300 x 375		350	290	M18	14
320 x 405 to 340 x 425		500	420	M20	17
360 x 455 to 400 x 495		675	560	M22	17

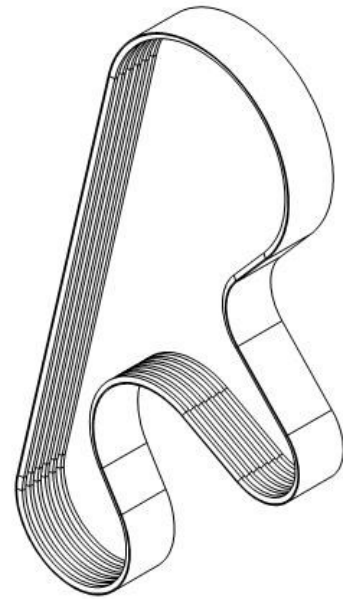


# Processor Parts





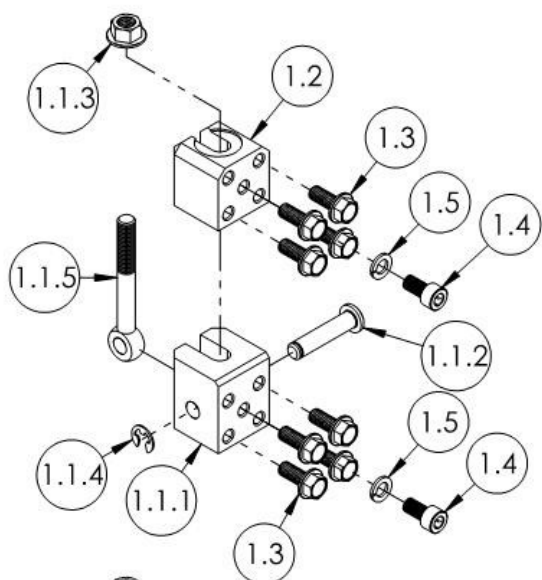
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	ASM10205	CHAIN TENSIONER	1
2	ASM10215	LUBRICATION LINE	2
3	ASM10216	LUBRICATION LINE	2
4	ASM10217	LUBRICATION LINE	2
5	B1002	SPRING BOLT WASHER	4
6	B1067	CHAIN ADJUSTMENT SPROCKET	2
7	D1334-7	SHIM	3
8	HOR1001	60MM TAPER ASSEMBLY	2
9	JDBM1001	LH LOWER CHEEK PLATE	1
10	JDBM1002	RH CHAIN GUIDE	1
11	JDBM1003	LH CHAIN GUIDE	1
12	JDBM1004	RH LOWER CHEEK PLATE	1
13	JDBM1005	ADJUSTMENT POINTER	1
14	JDBM1037	SHORT ADJ BOLT	1
15	JDBM1038	BEARING CAP	1
16	JDBM1040	ADJUSTMENT BOLT	1
17	JDBM1060	WOODRUFF KEY	1
18	JDBM1098	ADJUSTMENT HANDLE	1
19	JDBM1108	SLIDE STOP BOLT	1
20	JDBM2004	IDLE BEARING SLIDE ASSEMBLY	1
21	JDBM2005	DRIVE BEARING SLIDE ASSEMBLY	1
22	JDBM2009	ADJUSTMENT HANDLE KEEPER	1
23	JDFM2003	IDLE SHAFT BOLT	1
24	JDHM2007	OILER HOSE ASSEMBLY	1
24.1	SPL10028	MALE CAP	1
25	JDR1002-6-170	6 GROOVE PULLEY	1
26	JDR1003-6-250	6 GROOVE SMOOTH PULLEY	1
27	JDTM1001	LH UPPER CHEEK PLATE	1
28	JDTM1002	RH UPPER CHEEK PLATE	1
29	JDTM1003	SPRING ROD METRIC	4
30	JDTM1012	HINGE	2
31	JDTM1038	LONG ADJUSTMENT BOLT	1
32	JDTM1039	BEARING SLIDE SPRING	4
33	JDTM1040	SWIVEL JOINT	1
34	JDTM2041	SERVICE HINGE (IDLE)	1
35	JDTM2042	SERVICE HINGE (DRIVE)	1
36	NBB1001	NB IDLER SHAFT END CAP	1
37	NBB1002	NB IDLE PULLEY SHAFT	1
38	NBB2003	6 GROOVE IDLE PULLEY ASSEMBLY	1
38.1	D1329-7	RETAINING RING	2
38.2	D1331-7	BEARING SHIM W/OILING SLOTS	1
38.3	D1330-7	INNER BEARING	1
38.4	D1333-7	OUTER BEARING	1
39	NBB2005	FRAME SEAL	2
40	NBB2006	CHAIN ASSEMBLY	1
40.1	NBB2004	CHAIN	1
40.2	SPL10026	MASTER LINK	1
41	NBF2008	BOTTOM FRAME	1
42	NBF2009	TOP FRAME	1
43	NBT1000	LIFT HANDLE	1
44	NBT1001	CONNECTION SEAL	1
45	PRT10079	SLIDE HYD SKID PLATE	2
46	PRT10084	OIL MIST MANIFOLD	1
47	PRT10200	SPRING END CAP	2
48	SPL10001	PLUG	1
49	SPL10012	STRAIGHT ADAPTER	1
50	SPL10076	BEKA-MAX STRAIGHT COUPLING	8
51	SPL10115	90 DEG ELBOW	4
52	SPL10139	GROMMET	2



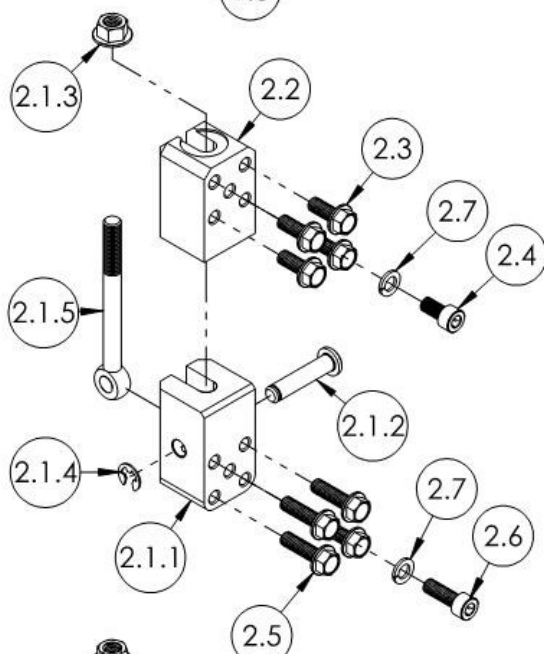
PART NUMBER	DESCRIPTION	QTY.
JDD1405	6 GROOVE BELT	1



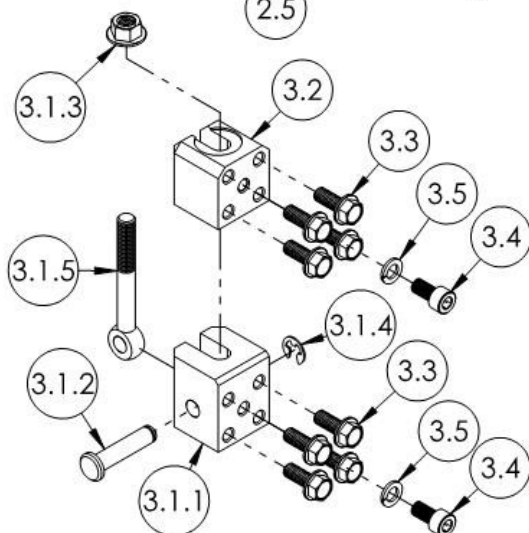
# Latch Block Parts



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	JDBM2017	REAR LATCH BLOCK ASSEMBLY	1
1.1	ASM10047	LATCH BLOCK BOTTOM ASSEMBLY	1
1.1.1	JDBM1130	CLAMP BRACKET WITH HANDLE MOUNT	1
1.1.2	JDBM1133	METRIC LATCH BLOCK EYE-BOLT PIN	1
1.1.3	NUT10001	SARRATED FLANGE NUT	1
1.1.4	SPL10005	E-CLIP	1
1.1.5	SPL10009	EYE BOLT	1
1.2	JDTM1057	TOP LATCH BLOCK	1
1.3	BLT10008	SERRATED FLANGE BOLT	8
1.4	BLT10009	SOCKET HEAD CAP SCREW	2
1.5	WSH10001	LOCK WASHER	2



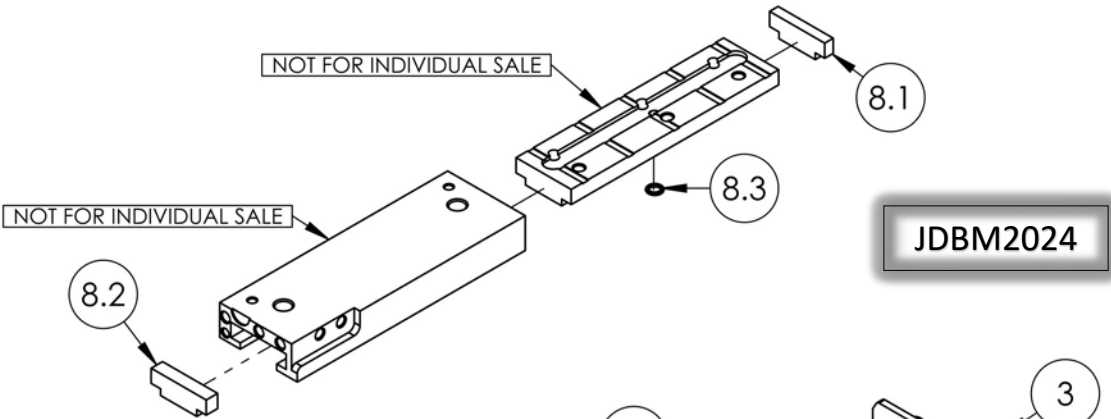
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
2	JDBM2018	DRIVE SIDE LATCH BLOCK ASSEMBLY	1
2.1	ASM10048	LATCH BLOCK BOTTOM ASSEMBLY	1
2.1.1	JDBM1131	CLAMP BRACKET LONG	1
2.1.2	JDBM1133	METRIC LATCH BLOCK EYE-BOLT PIN	1
2.1.3	NUT10001	SARRATED FLANGE NUT	1
2.1.4	SPL10005	E-CLIP	1
2.1.5	SPL10010	EYE BOLT	1
2.2	JDTM1132	LONG TOP LATCH BLOCK	1
2.3	BLT10008	SERRATED FLANGE BOLT	4
2.4	BLT10009	SOCKET HEAD CAP SCREW	1
2.5	BLT10029	SERRATED FLANGE BOLT	4
2.6	BLT10030	SOCKET HEAD CAP SCREW	1
2.7	WSH10001	LOCK WASHER	2



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
3	JDBM2019	IDLE SIDE LATCH BLOCK ASSEMBLY	1
3.1	ASM10049	LATCH BLOCK BOTTOM ASSEMBLY	1
3.1.1	JDBM1035	CLAMP BRACKET	1
3.1.2	JDBM1133	METRIC LATCH BLOCK EYE-BOLT PIN	1
3.1.3	NUT10001	SARRATED FLANGE NUT	1
3.1.4	SPL10005	E-CLIP	1
3.1.5	SPL10009	EYE BOLT	1
3.2	JDTM1057	TOP LATCH BLOCK	1
3.3	BLT10008	SERRATED FLANGE BOLT	8
3.4	BLT10009	SOCKET HEAD CAP SCREW	2
3.5	WSH10001	LOCK WASHER	2

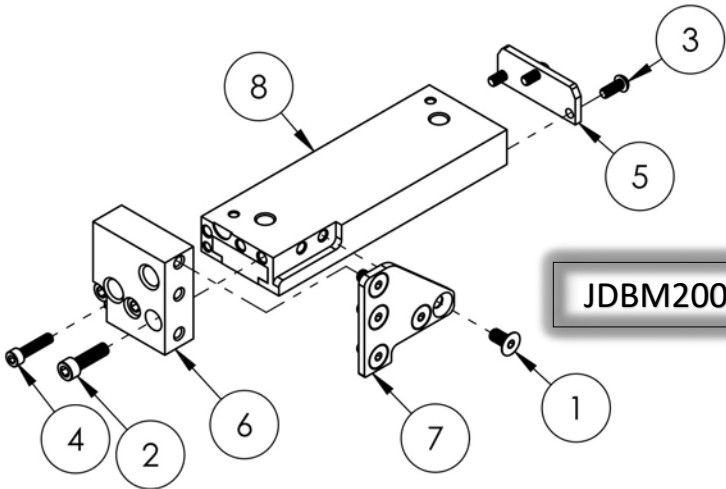


# Slide Parts

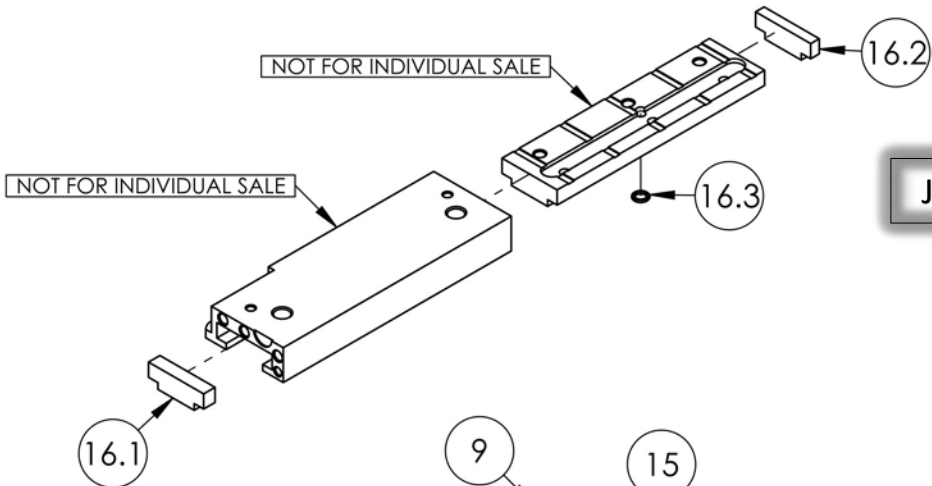


JDBM2024

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BLT10007	FLAT HEAD SCREW	5
2	BLT10023	SOCKET HEAD CAP SCREW	3
3	BLT10024	BUTTON HEAD BOLT	3
4	BLT10025	SOCKET HEAD CAP SCREW	1
5	JDBM1017	FRONT END CAP	1
6	JDBM1063	LEFT REAR SLIDE CAP	1
7	JDBM1106	LEFT BEARING SLIDE GUSSET	1
8	JDBM2024	IDLE SLIDE OUTER & INNER ASSEMBLY	1
8.1	JDBM1059	INNER SLIDE SPACER THIN	1
8.2	JDBM1058	INNER SLIDE SPACER THICK	1
8.3	HPMT1105	O-RING	1

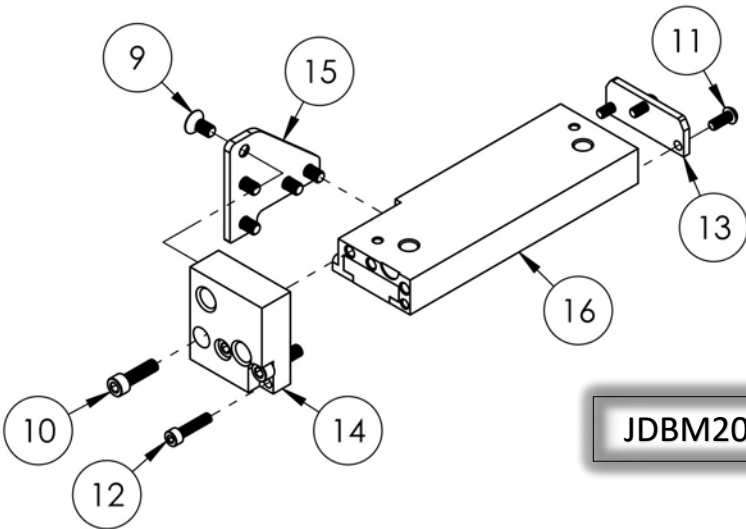


JDBM2004



JDBM2023

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
9	BLT10007	FLAT HEAD SCREW	5
10	BLT10023	SOCKET HEAD CAP SCREW	3
11	BLT10024	BUTTON HEAD BOLT	3
12	BLT10025	SOCKET HEAD CAP SCREW	1
13	JDBM1017	FRONT END CAP	1
14	JDBM1030	RIGHT REAR SLIDE CAP	1
15	JDBM1107	RIGHT BEARING SLIDE GUSSET	1
16	JDBM2023	DRIVE SLIDE OUTER & INNER ASSEMBLY	1
16.1	JDBM1058	INNER SLIDE SPACER THICK	1
16.2	JDBM1059	INNER SLIDE SPACER THIN	1
16.3	HPMT1105	O-RING	1



JDBM2005



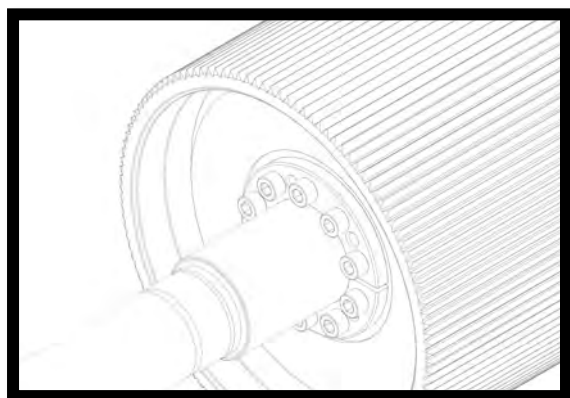
This exploded view diagram illustrates the assembly of a mechanical device, likely a pump or motor. The main body (1) is shown with various components being attached. Key parts include a long shaft (7) with a pulley (26) at one end, a drive pulley (27) on the opposite end, and a timing belt (28). The assembly is supported by a base (2) and includes a mounting bracket (3) and a cover (4). A cable (19) is connected to the top of the unit. The diagram uses numbered callouts (1-35) to identify individual parts and their assembly sequence.



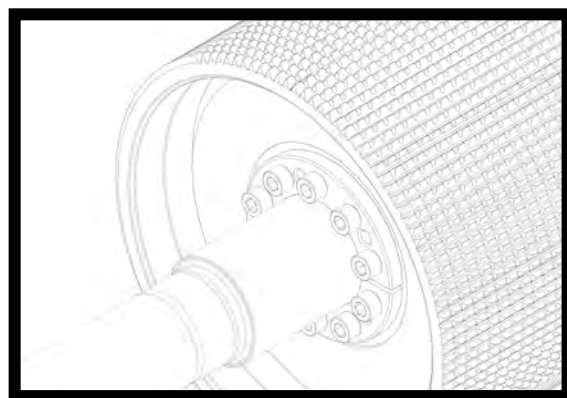
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BLT10005	FLAT HEAD SCREW	12
2	BLT10006	FLAT HEAD SCREW	4
3	BLT10008	SERRATED FLANGE BOLT	20
4	BLT10009	SOCKET HEAD CAP SCREW	5
5	BLT10011	SERRATED FLANGE BOLT	4
6	BLT10012	SOCKET HEAD CAP SCREW	4
7	BLT10013	SOCKET HEAD CAP SCREW	2
8	BLT10015	SOCKET HEAD CAP SCREW	8
9	BLT10016	FLANGE BOLT	2
10	BLT10021	BUTTON HEAD SCREW	2
11	BLT10026	SERRATED FLANGE BOLT	4
12	BLT10029	SERRATED FLANGE BOLT	4
13	BLT10030	SOCKET HEAD CAP SCREW	1
14	BLT10041	FLAT HEAD SCREW	1
15	BLT10046	SOCKET HEAD CAP SCREW	12
16	BLT10052	FLANGE BOLT	8
17	BLT10100	FLANGED SOCKET HEAD CAP SCREW	2
18	BLT10101	FLANGED SOCKET HEAD CAP SCREW	2
19	BLT10142	HEX HEAD BOLT	2
20	BLT10148	BUTTON HEAD SCREW	4
21	D1326	HEX HEAD BOLT	5
22	D1327	LOCK WASHER	1
23	HPT1099	LOCKING PIN	1
24	NUT10000	HEX NUT	2
25	NUT10002	LOCK NUT	2
26	SPL10002	SET SCREW	2
27	SPL10003	MACHINE KEY	2
28	SPL10006	ZERK	2
29	SPL10007	SPRING PIN	1
30	SPL10008	SPRING PIN	1
31	WSH10001	LOCK WASHER	6
32	WSH10002	LOCK WASHER	4
33	WSH10003	LOCK WASHER	2
34	WSH10007	FLAT WASHER	2
35	WSH10008	RUBBER WASHER	4



# Replacement Roll Assemblies



Sawtooth Roll



Twin Cut (TC) Roll

## Preferred Roll Pairings

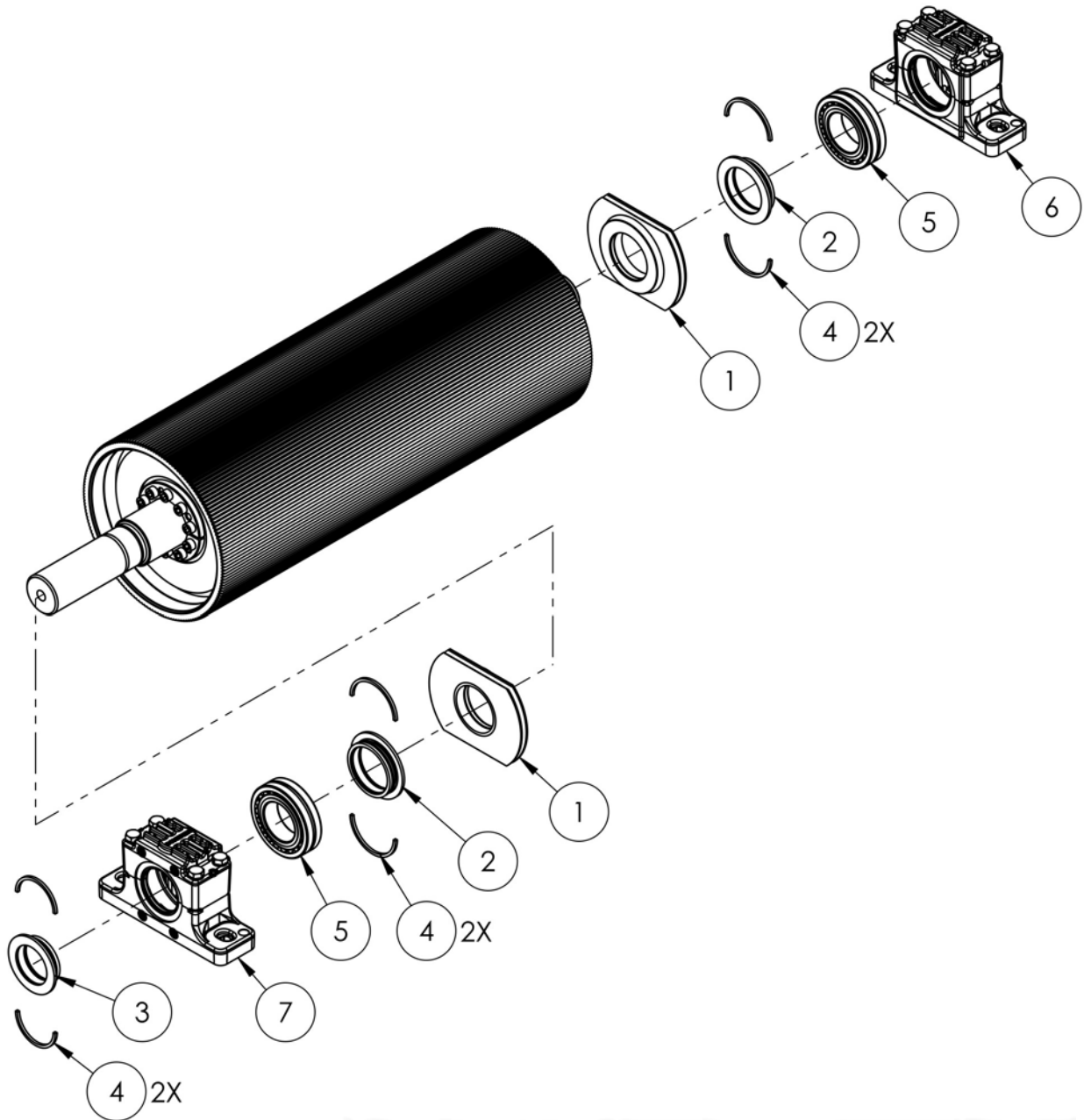
Corn = 110-145

Whole Crop: 145-165

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	NBR2004-110-C	110 SAW TOOTH COMPLETE ROLL	1
2	NBR2001-110-C	110 TWIN CUT COMPLETE ROLL	1
3	NBR2005-145-C	145 SAW TOOTH COMPLETE ROLL	1
4	NBR2002-145-C	145 TWIN CUT COMPLETE ROLL	1
5	NBR2006-165-C	165 SAW TOOTH COMPLETE ROLL	1
6	NBR2003-165-C	165 TWIN CUT COMPLETE ROLL	1
7	NBR2004-110-C-NH	110 SAWTOOTH ROLL ASSY NO HSNCS	1
8	NBR2001-110-C-NH	110 TC ROLL ASSY NO HSNCS	1
9	NBR2005-145-C-NH	145 SAWTOOTH ROLL ASSY NO HSNCS	1
10	NBR2002-145-C-NH	145 TC ROLL ASSY NO HSNCS	1
11	NBR2006-165-C-NH	165 SAWTOOTH ROLL ASSY NO HSNCS	1
12	NBR2003-165-C-NH	165 TC ROLL ASSY NO HSNCS	1



# Roll Parts

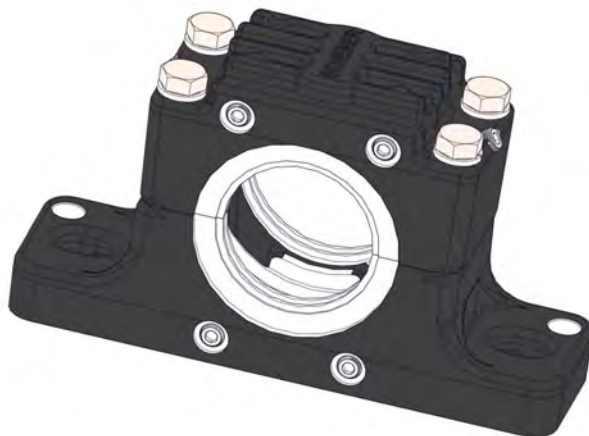
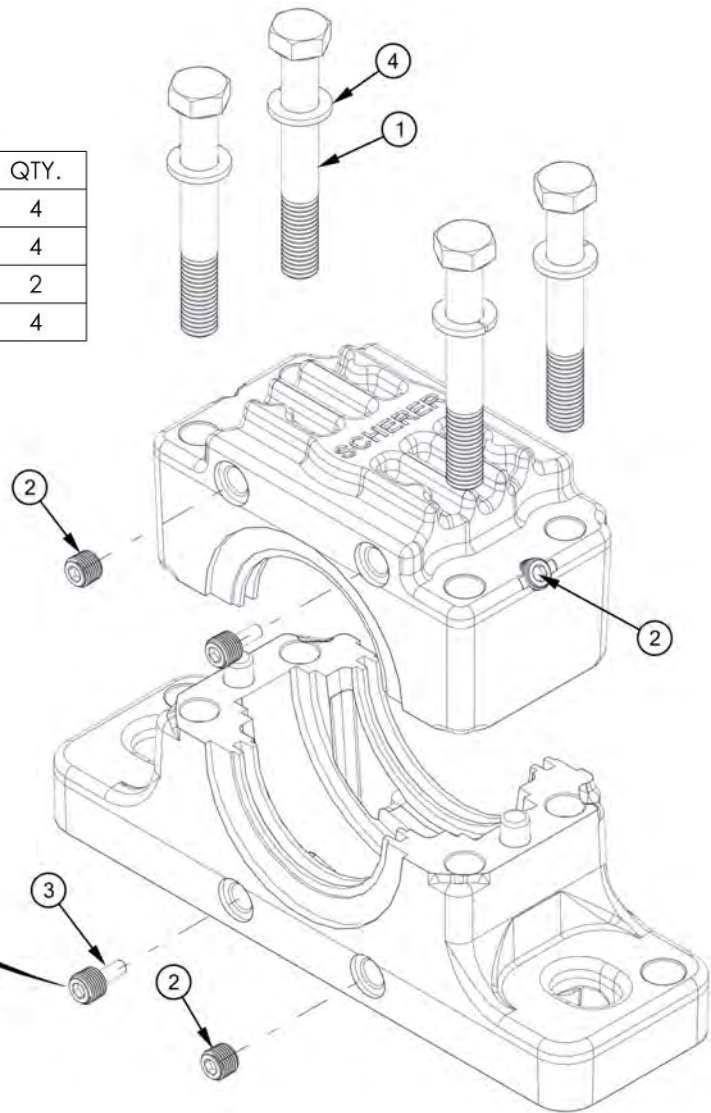


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	JDRM1011	SPOOL SEAL ASSEMBLY	2
2	HOR1004.70	70MM INSIDE HSG SEAL ASSY	2
3	HOR1004.60	60 MM OUTSIDE HOUSING SEAL	1
4	HPR1009	FIBER OIL SEAL	6
5	HOR1007	60MM BEARING	2
6	JDRM2016	IDLE BEARING HOUSING ASSEMBLY	1
7	JDRM2018	DRIVE BEARING HOUSING ASSEMBLY	1



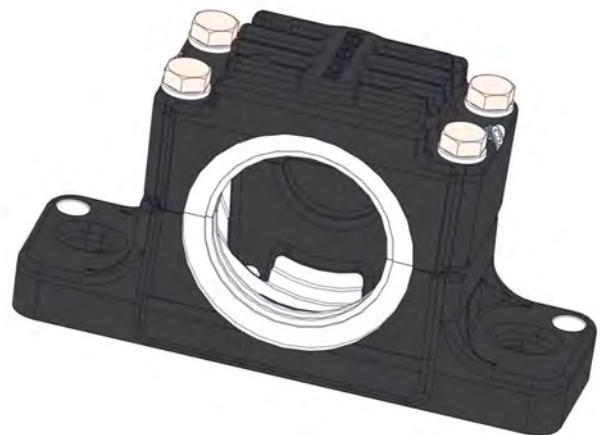
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BLT10000	HEX HEAD BOLT	4
2	SPL10001	PLUG	4
3	SPL10013	MAGNETIC PLUG	2
4	WSH10000	LOCK WASHER	4

Magnetic Tip



Part Number JDRM2018

Drive side

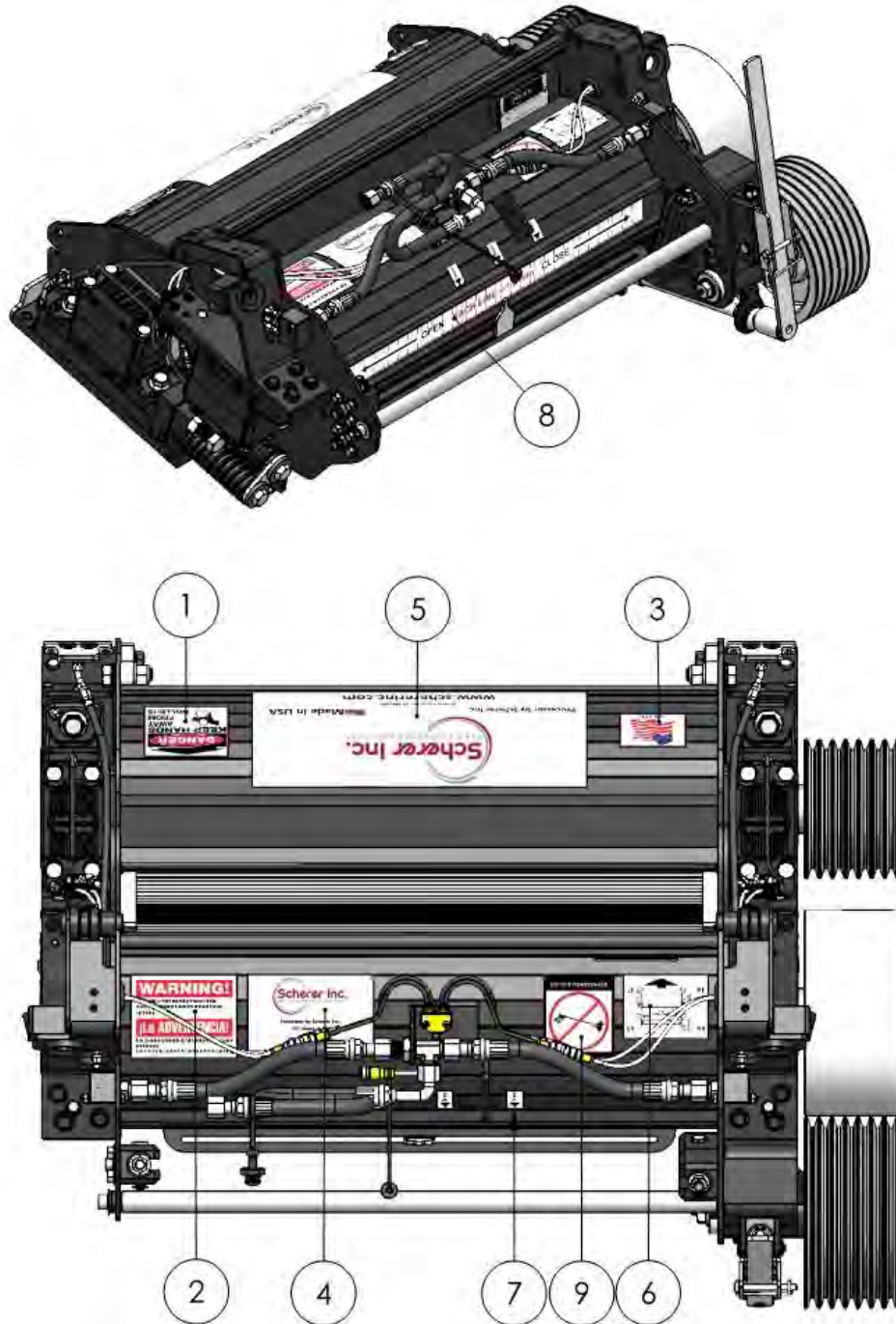


Part Number JDRM2016

Idle side



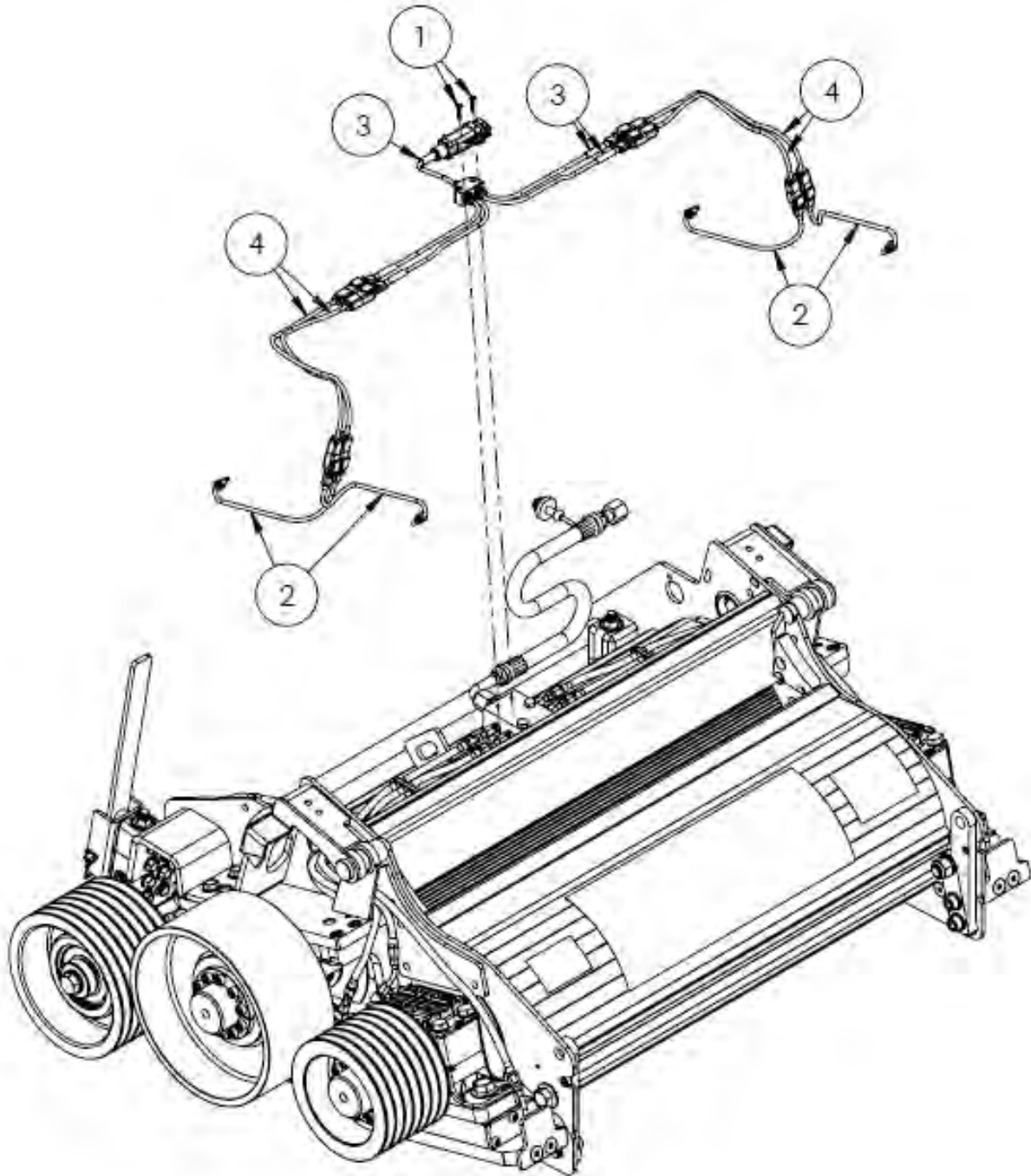
# Processor Decals



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	DEC1001	DANGER : ROLLERS	1
2	DEC1002	WARNING	1
3	DEC1003	MADE IN AMERICA	1
4	DEC1005	SCHERER PRCESSOR (SMALL)	1
5	DEC1009	SCHERER PROCESSOR (LARGE)	1
6	DEC1012	PROCESSOR ORIENTATION	1
7	DEC1013	ROLL GAP POINTERS	3
8	DEC1046	8KW SCALE	1
9	DEC1050	DO NOT POWERWASH	1



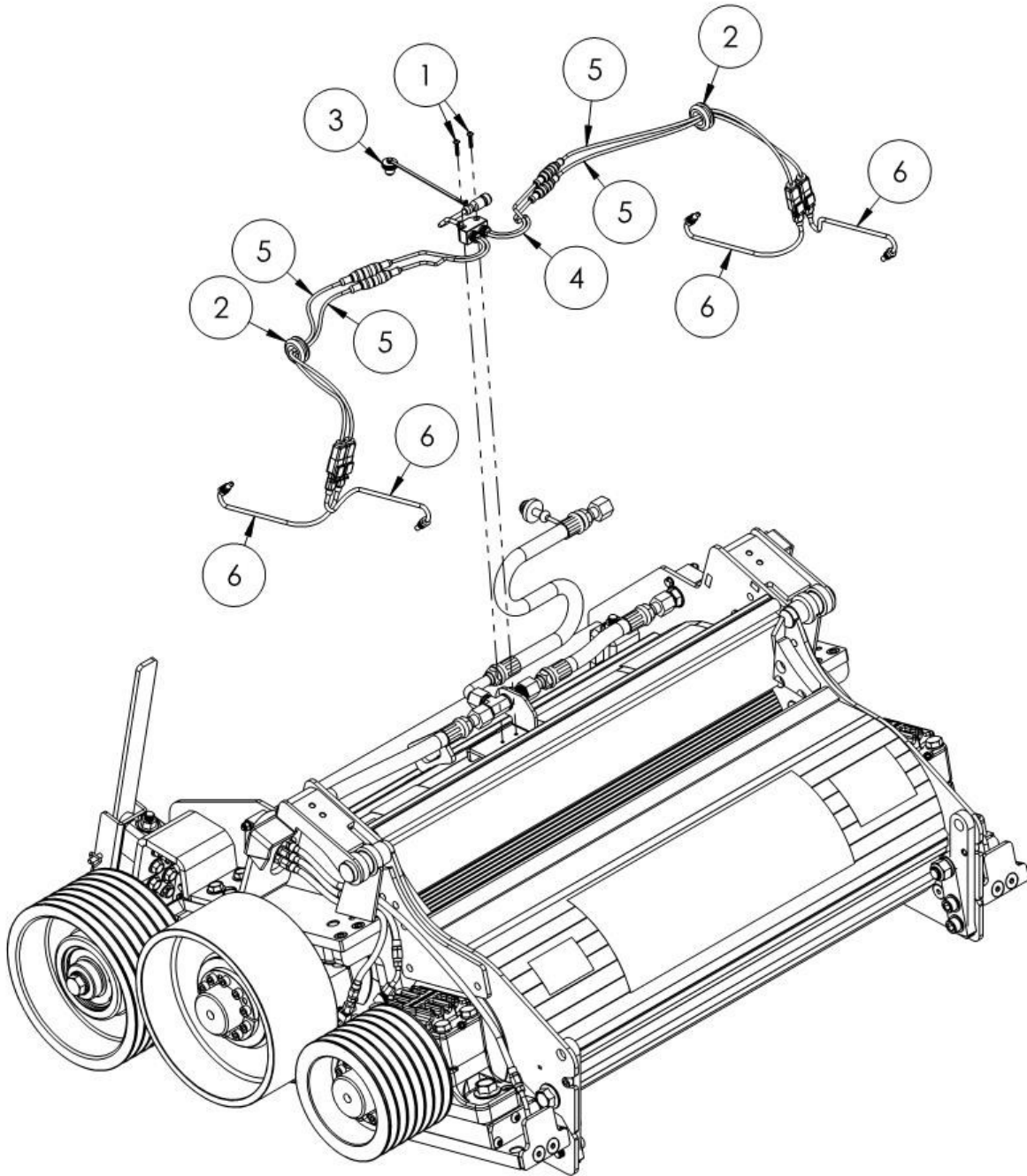
# Sensor Package



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BLT10021	BUTTON HEAD SCREW	2
2	PM22007	TEMPERATURE PROBE	4
3	PM22008	SPLITTER CABLE	1
4	PM22009	EXTENSION WIRE	4



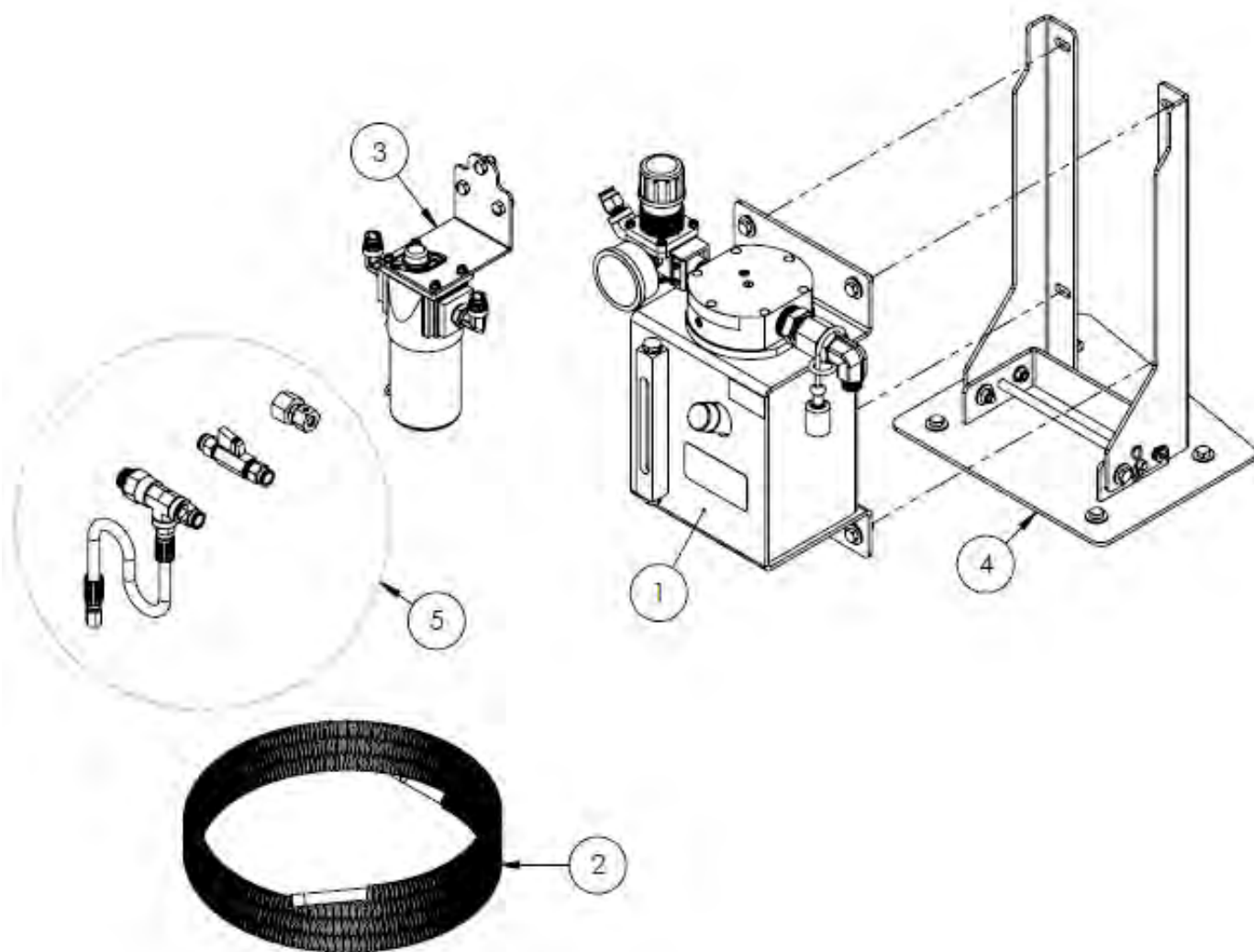
## **PARTS ONLY - PRE-MY22 KP Sensor Parts**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BLT10021	BUTTON HEAD SCREW	2
2	HPT1106	GROMMET	2
3	PM3016	MALE ELECTRICAL CAP W/ LANYARD	1
4	PM3025	SPLITTER CABLE	1
5	PM23026	EXTENSION WIRE	4
6	PM22007	TEMPERATURE PROBE	4



# ScherMist® System

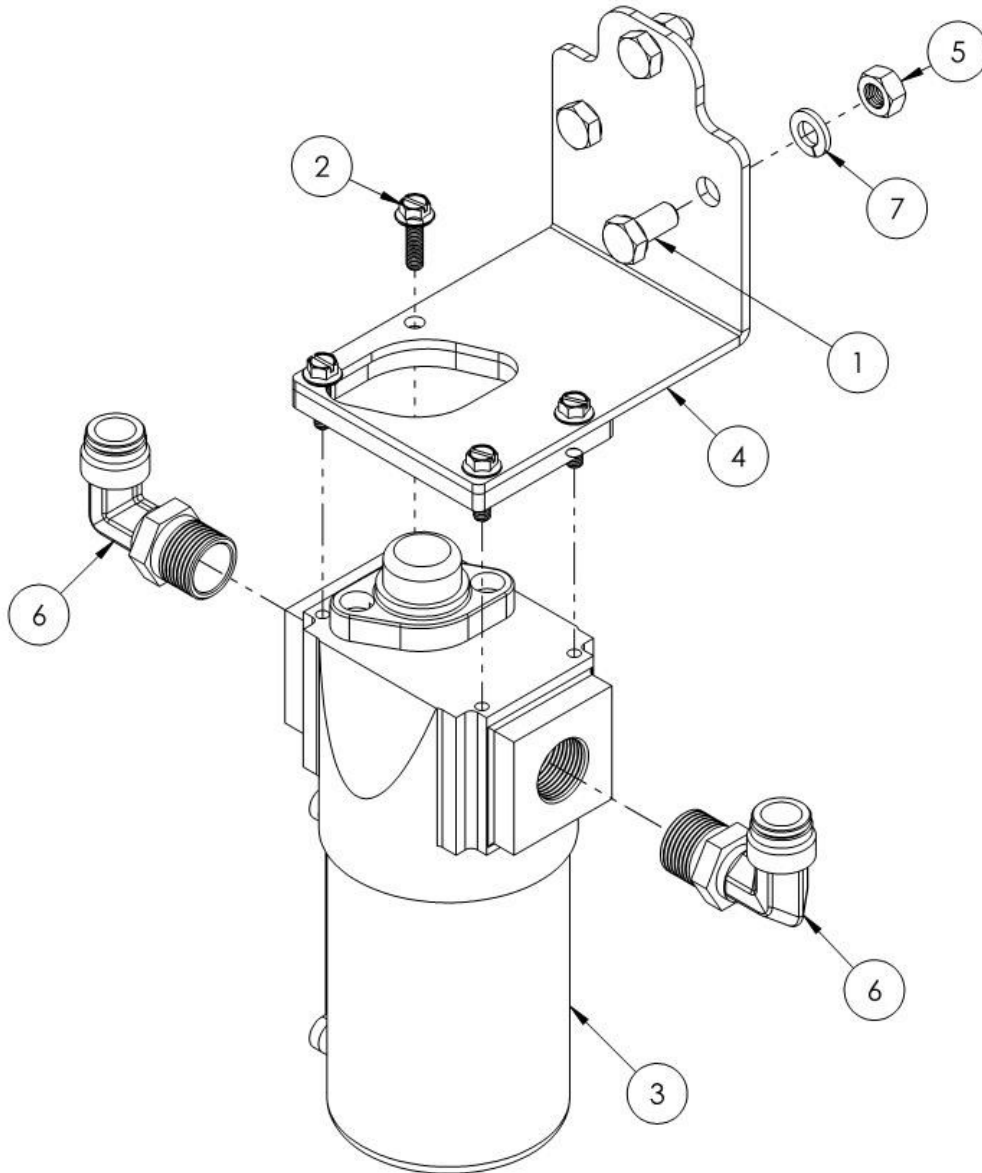


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	ASM10192	8K OIL TANK ASSEMBLY	1
2	D1348	12mm HOSE AND LOOM	1
3	HPD1427	FILTER ASSEMBLY	1
4	JDM2000	OIL MISTER MOUNTING BRACKET	1
5	OM5006	AIR FITTING KIT	1



# ScherMist® Filter Assembly

Complete System: Part# HPD1427

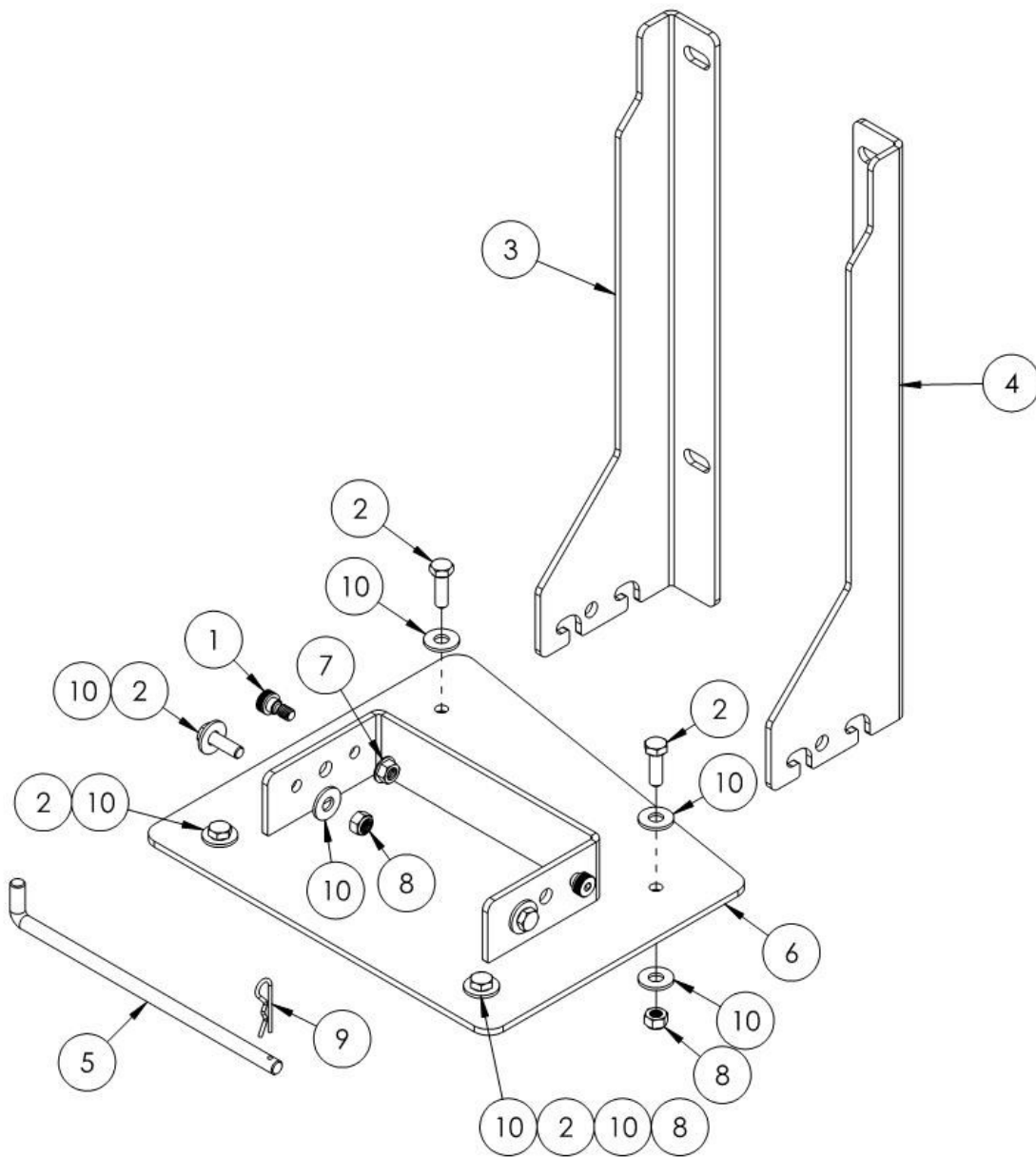


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BLT10042	HEX HEAD BOLT	3
2	BLT10047	FLAT HEAD SCREW	4
3	HPD1411	FILTER	1
4	HPD1414	FILTER MOUNTING BRACKET	1
5	NUT10010	HEX NUT	3
6	OM1033	90 DEGREE SWIVEL PUSH-TO-CONNECT FITTING	2
7	WSH10002	LOCK WASHER	3



# ScherMist® Oil Tank Mounting Bracket

Complete System: **Part# JDM2000**

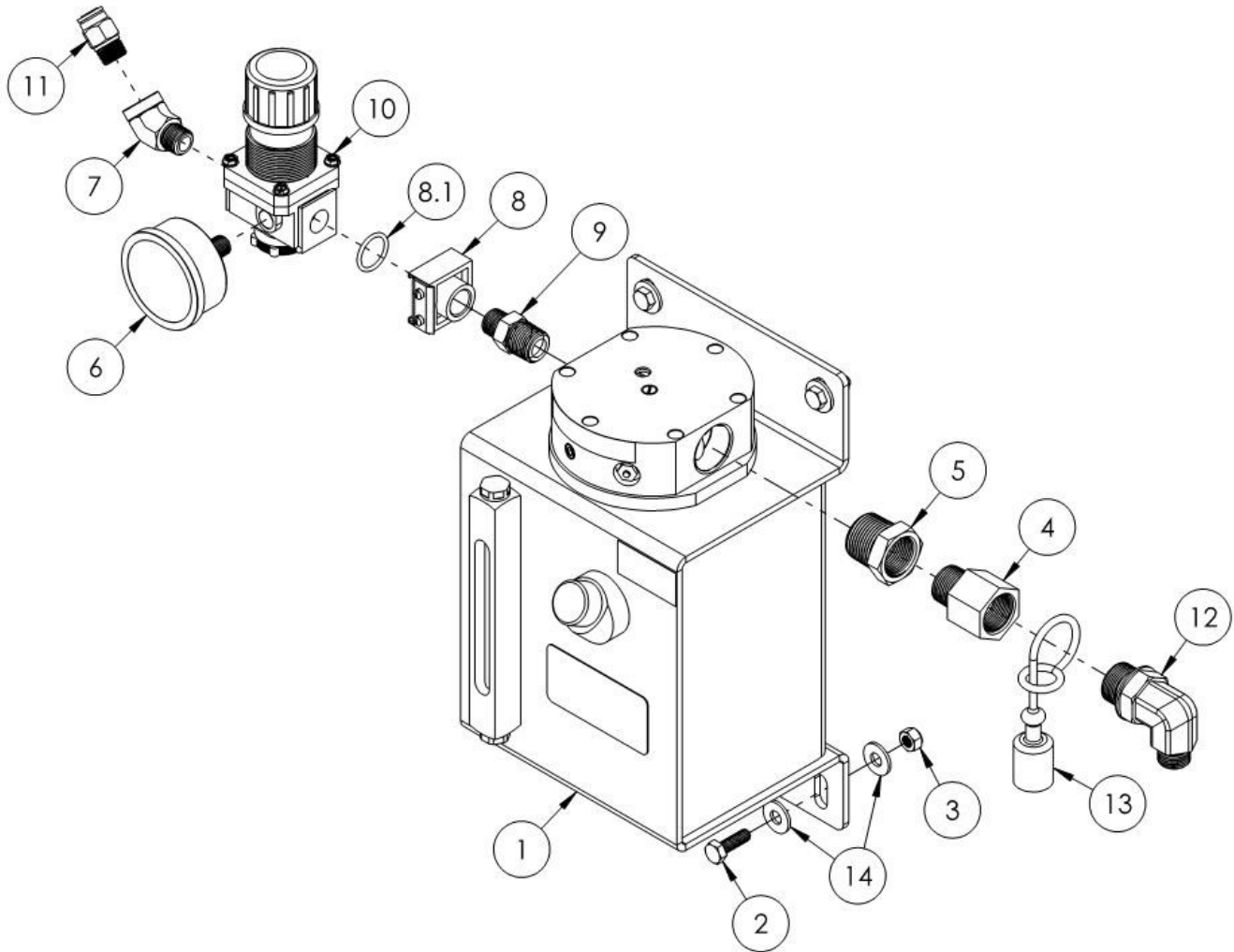


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BLT10039	SHOULDER BOLT	2
2	BLT10043	HEX HEAD BOLT	6
3	JDM1006	OIL MISTER LH MOUNTING LEG	1
4	JDM1008	OIL MISTER RH MOUNTING LEG	1
5	JDM1009	OIL MISTER RETAINING PIN	1
6	JDM2001	OIL MISTER MOUNTING BASE	1
7	NUT10008	SERRATED FLANGE NUT	2
8	NUT10009	LOCK NUT	4
9	SPL10029	HAIRPIN COTTER	1
10	WSH10005	FLAT WASHER	10



# ScherMist® Oil Tank Assembly

Complete System: **Part# ASM10192**

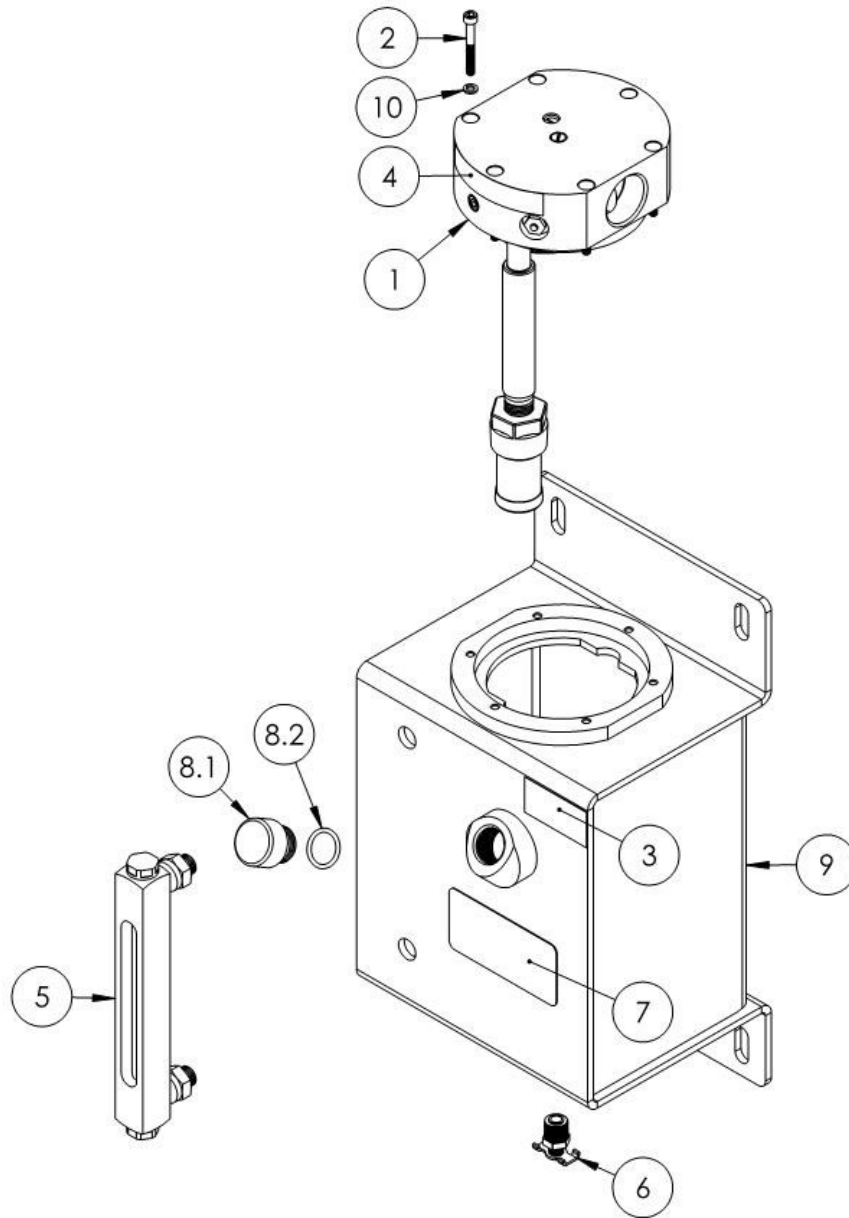


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	ASM10086	SCHERMIST RETRO	1
2	BLT10043	HEX HEAD BOLT	4
3	NUT10009	LOCK NUT	4
4	OM1030	STRAIGHT ADAPTER	1
5	OM1003	STRAIGHT ADAPTER	1
6	OM1015	PRESSURE GUAGE	1
7	OM1017	45 DEGREE MALE TO FEMALE FITTING	1
8	OM1020	PIPE PORT	1
8.1	OM1020.1	O-RING	1
9	OM1022	STRAIGHT REDUCER	1
10	OM1023	REGULATOR	1
11	OM1025	PUSHLOCK FITTING	1
12	OM1034	90 DEGREE ADAPTER FITTING	1
13	SPL10027	FEMALE CAP	1
14	WSH10005	FLAT WASHER	8



# ScherMist® Oil Tank

## Complete System: Part# ASM10086

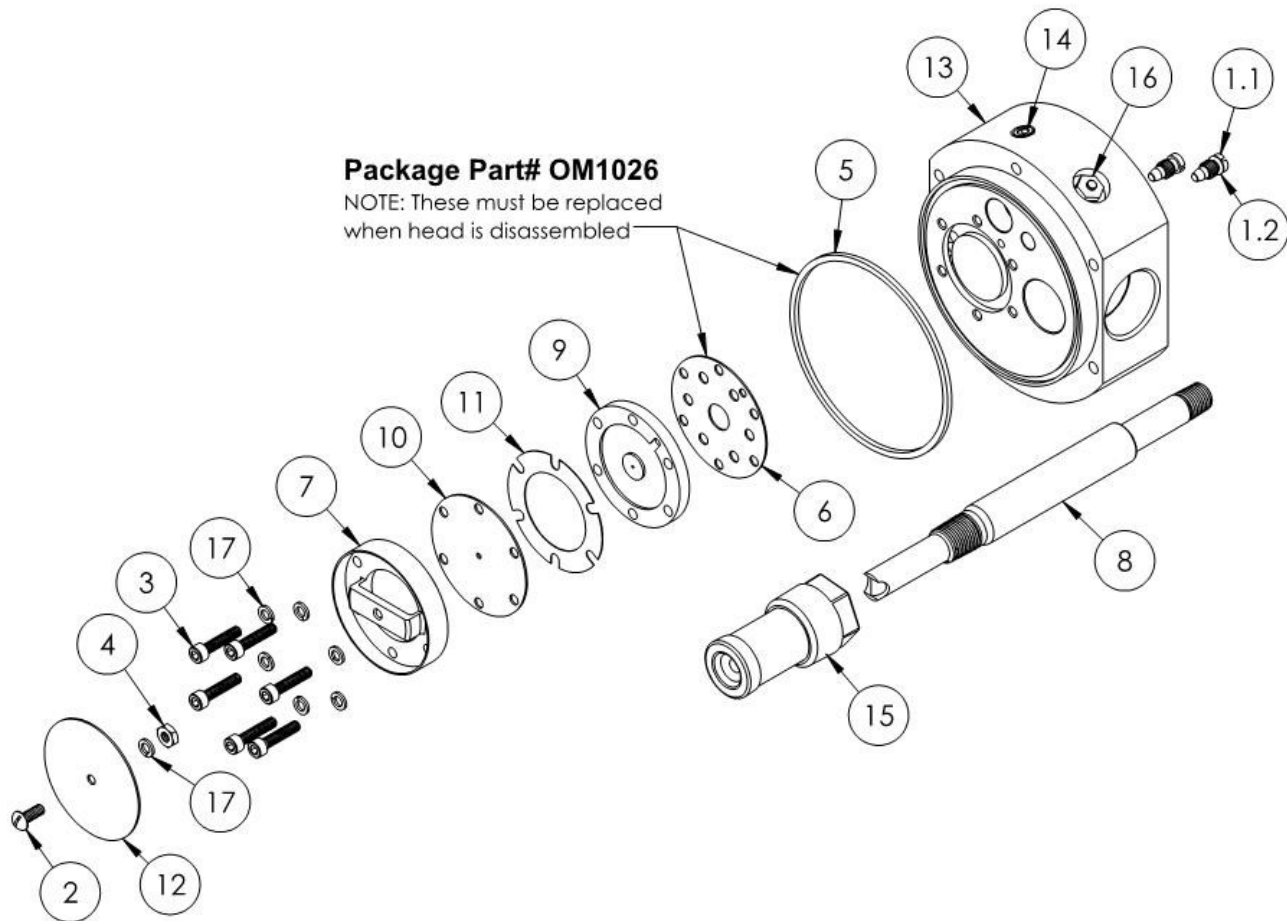


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	ASM10061	SCHERMIST HEAD ASSEMBLY	1
2	BLT10140	SOCKET HEAD SCREW	6
3	DEC1004	35PSI SET PRESSURE	1
4	DEC1007	WARNING : DO NOT OVER PRESSURIZE	1
5	OM1012	SIGHT GLASS	1
6	OM1039	STOP COCK DRAIN	1
7	OM1121	OIL TANK SERIAL PLATE	1
8	OM2026	CAP ASSEMBLY	1
8.1	OM1112	OIL RESERVOIR FILL CAP	1
8.2	SPL10043	O-RING	1
9	OM5016	OIL RESEVOIR WLDMNT	1
10	WSH10006	LOCK WASHER	6



# ScherMist® Oil Tank Head Assembly

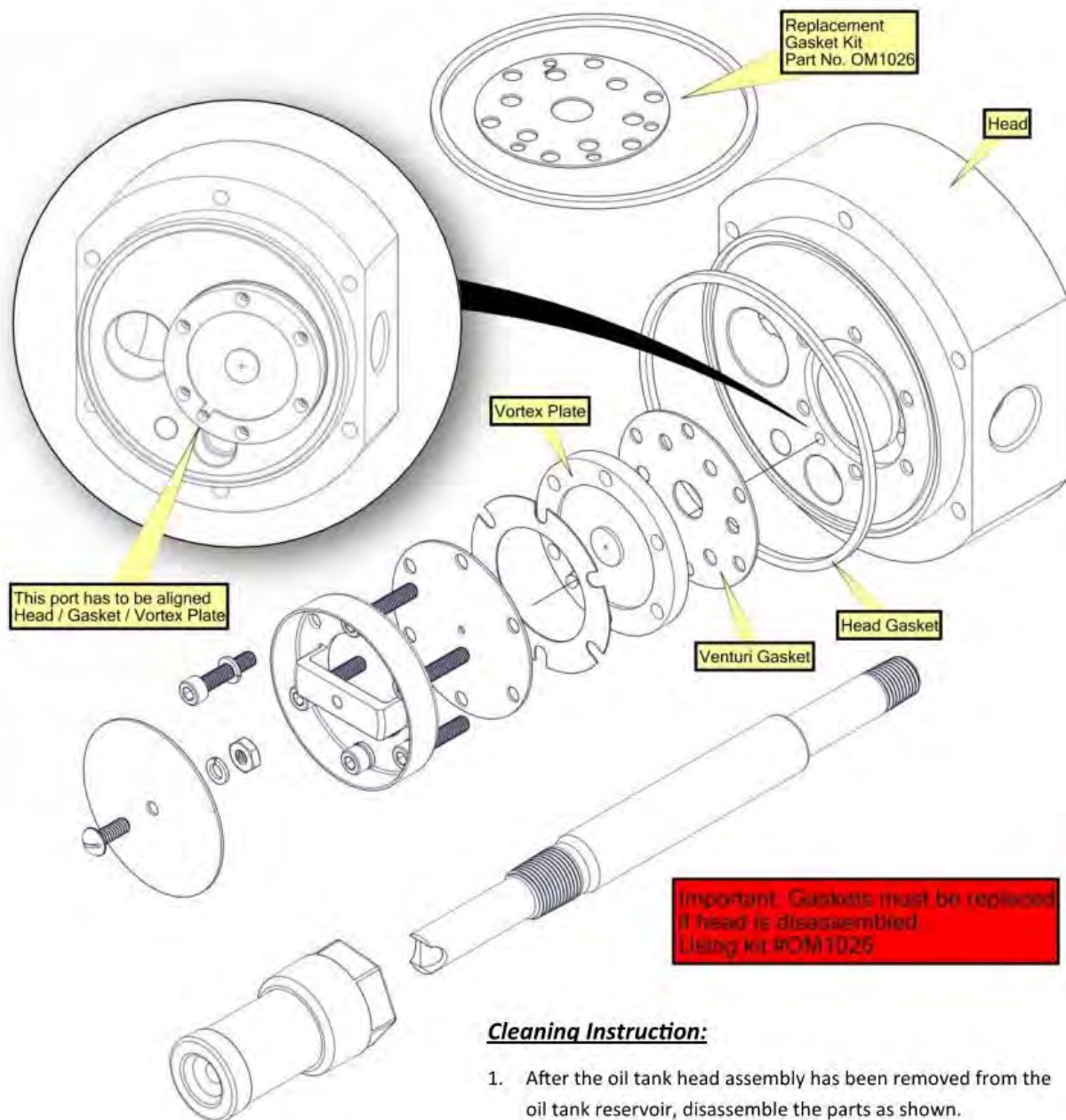
Complete System: **Part# ASM10061**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	ASM10075	AIR SCREW ASSEMBLY	2
1.1	OM2011	AIR FLOW ADJ SCREW	1
1.2	SPL10044	O-RING	1
2	BLT10044	MACHINE SCREW	1
3	BLT10071	SOCKET HEAD CAP SCREW	6
4	NUT10011	MACHINE HEX NUT	1
5	OM1026.2	HEAD GASKET	1
6	OM1109	VENTURI GASKET	1
7	OM1110	BAFFLE CUP	1
8	OM1114	STRAINER MNTG TUBE	1
9	OM2002	VORTEX PLATE	1
10	OM2003	MISTER OIL PLATE	1
11	OM2004	OIL PLATE SPACER	1
12	OM2008	IMPINGEMENT PLATE	1
13	OM2027	MISTER HEAD	1
14	R1235	PIPE PLUG	1
15	SPL10045	STRAINER	1
16	SPL10064	RELIEF VALVE	1
17	WSH10006	LOCK WASHER	7



# ScherMist® Head Rebuild

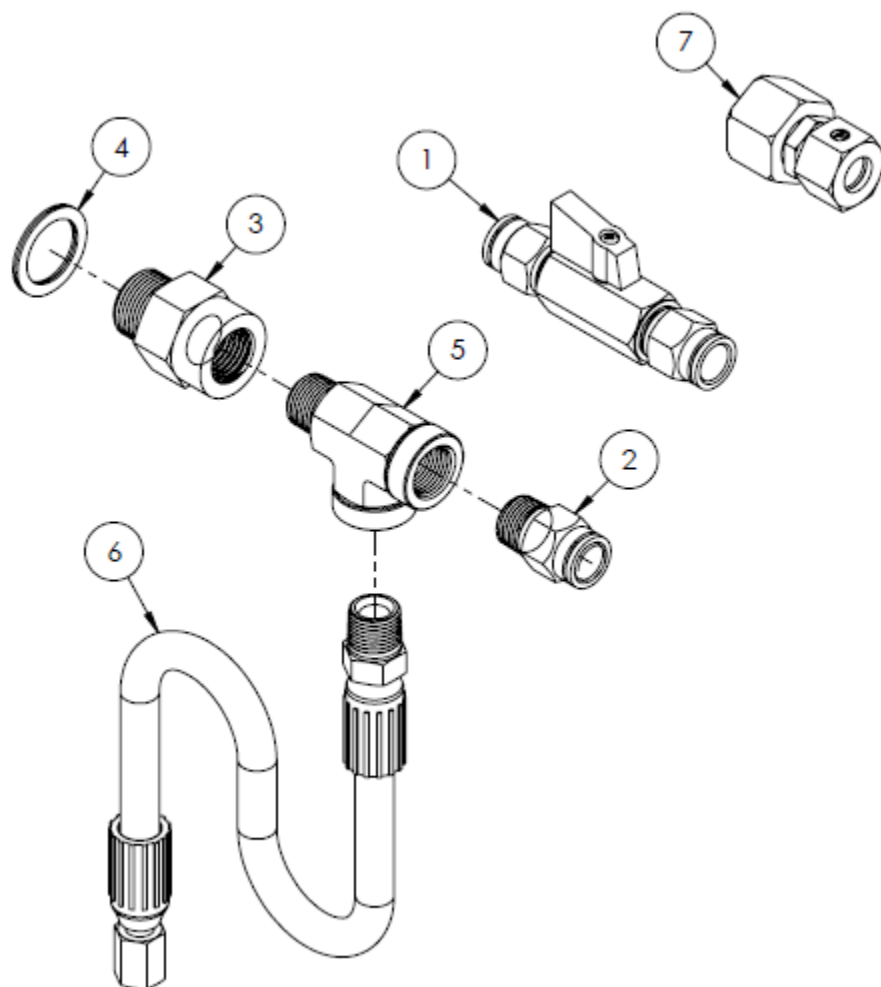


## Cleaning Instruction:

1. After the oil tank head assembly has been removed from the oil tank reservoir, disassemble the parts as shown.
2. Clean all parts in a safe, clean solvent. Air dry after cleaning.
3. **CRITICAL ASSEMBLY FEATURE** Reassemble the parts as shown above. The oil port hole must align thru all 3 components: Head / Venturi Gasket / Vortex Plate.
4. Reassemble head and torque the 6 screws to 22 in-lbs.
5. Install head gasket when installing the ScherMist® head onto the oil reservoir.



# ScherMist® Air Fitting Kit

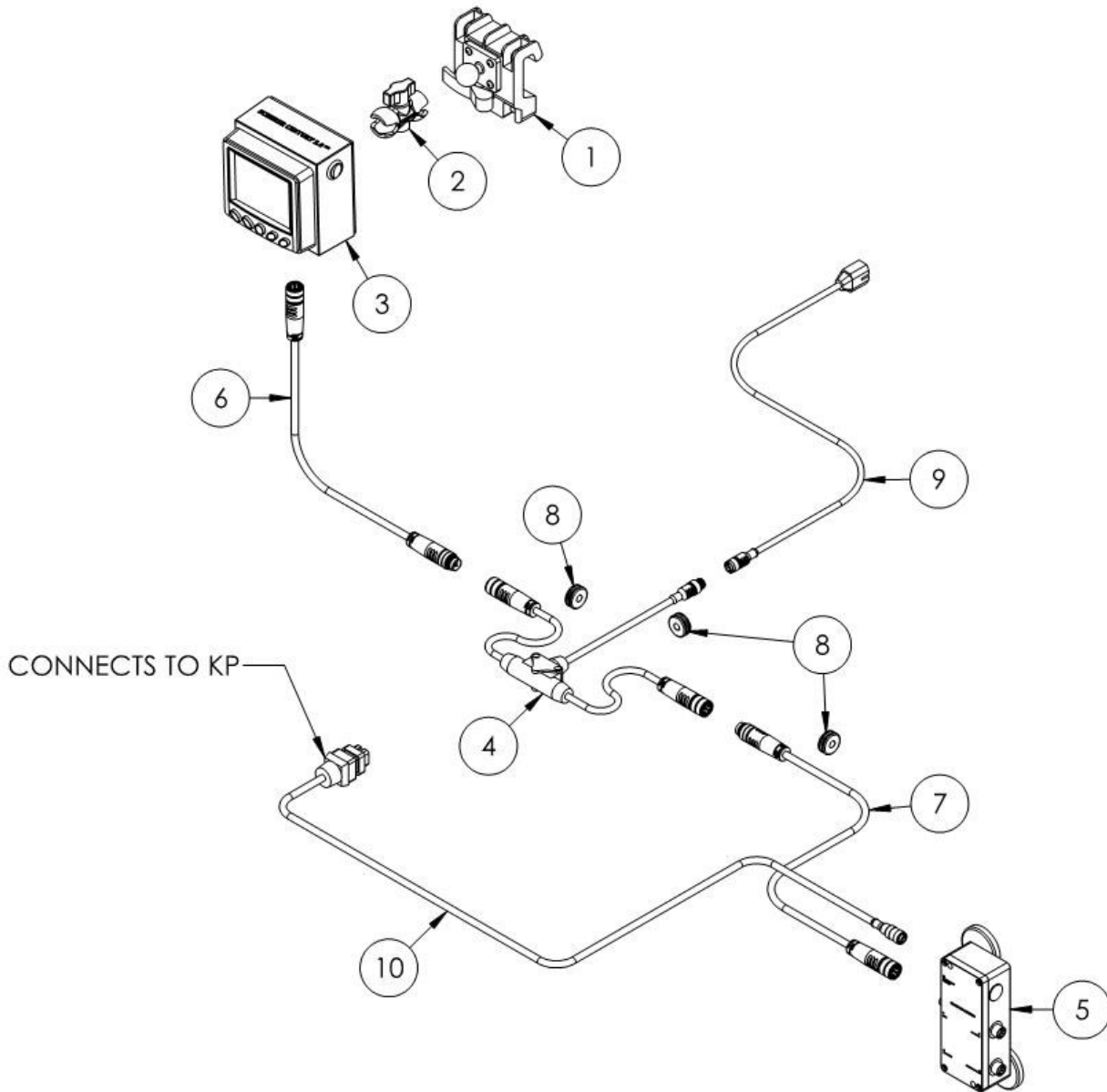


ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	HPD1359	12MM VALVE ASSEMBLY	1
2	OM1025	PUSHLOCK FITTING	1
3	OM1040	UNION	1
4	OM1041	SEALING WASHER	1
5	OM1042	TEE FITTING	1
6	OM1043	HOSE ASSEMBLY	1
7	OM5011	AIR FITTING	1



# Scherer Sentry System

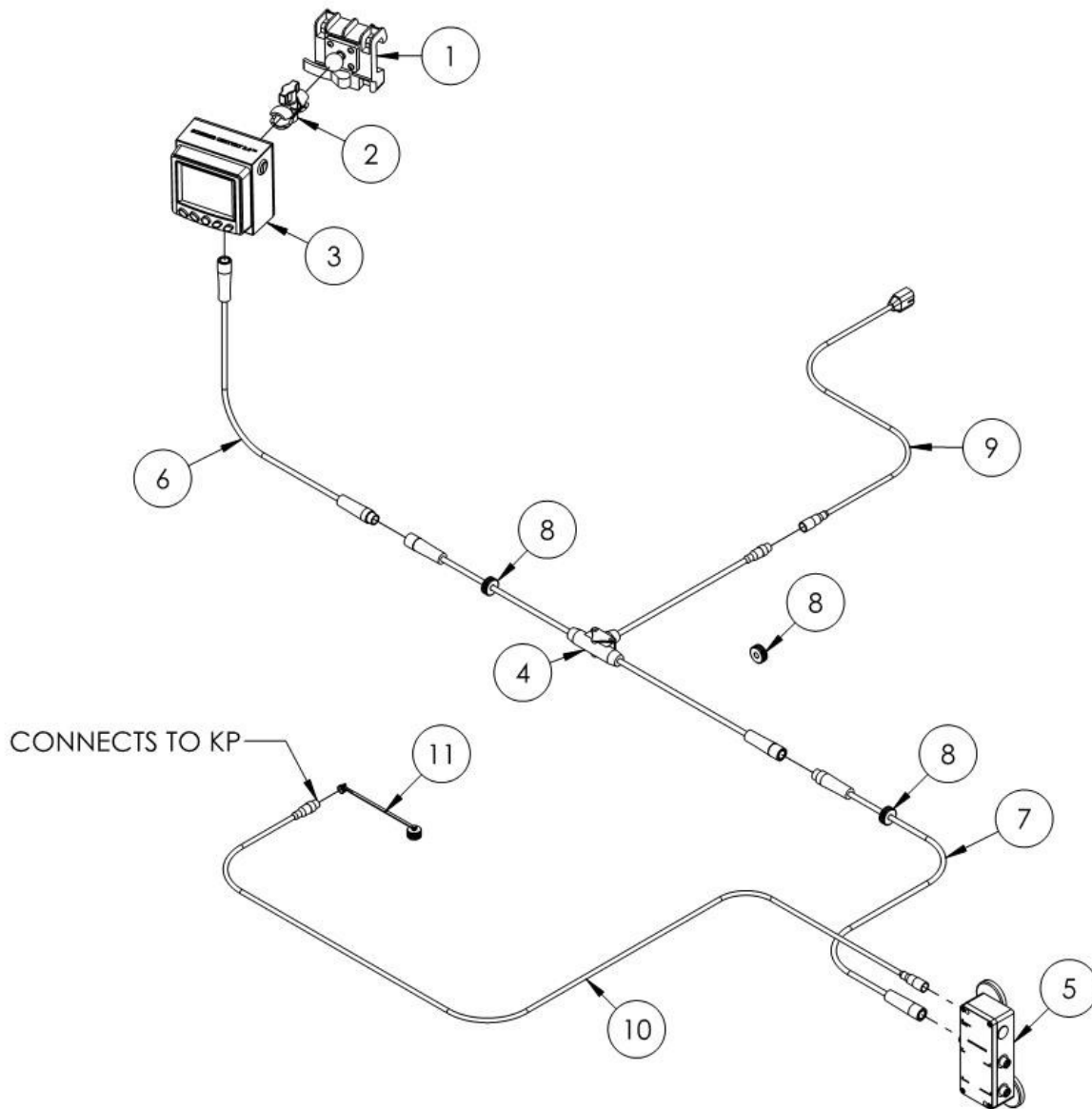
Complete System: **Part# ASM10266**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BXE10480	RAIL MOUNT	1
2	PM1006	MOUNTING ARM	1
3	PM21001	SENTRY MONITOR ASSEMBLY	1
4	PM21002	TEE ADAPTER	1
5	PM21004	JUNCTION BOX ASSEMBLY	1
6	PM21006	SHORT EXTENSION CABLE	1
7	PM21007	LONG EXTENSION CABLE	1
8	PM21010	GROMMET	3
9	PM23031	POWER CORD	1
10	PM3036	ADAPTOR CORD	1



## **PARTS ONLY** - PRE-MY22 KP Scherer Sentry System



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	BXE10480	RAIL MOUNT	1
2	PM1006	MOUNTING ARM	1
3	PM21001	SCREEN ASSEMBLY	1
4	PM21002	TEE ADAPTER	1
5	PM21004	JUNCTION BOX ASSEMBLY	1
6	PM21006	SHORT EXTENSION CABLE	1
7	PM21007	LONG EXTENSION CABLE	1
8	PM21010	GROMMET	3
9	PM23031	POWER CORD	1
10	PM3014	KP CABLE	1
11	PM3019	FEMALE ELECTRICAL CAP W/ LANYARD	1