



CREATING  
**VALUE**

# COOLING AIR SYSTEM

**JOY**GLOBAL

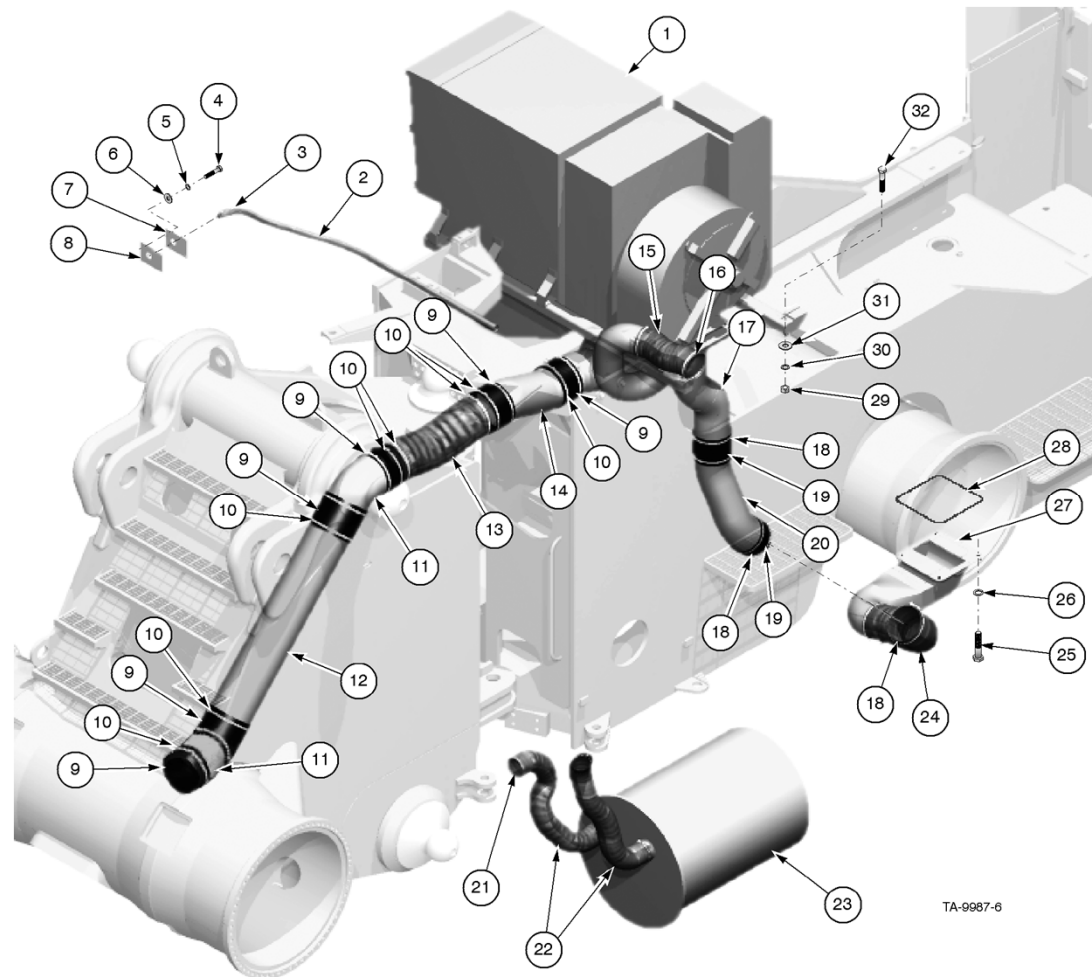


# COOLING AIR SYSTEM

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- Theory of Operation
- Component Descriptions
- Circuit Descriptions
- Settings and Adjustments
- Troubleshooting
- Removal and Installation

# THEORY OF OPERATION



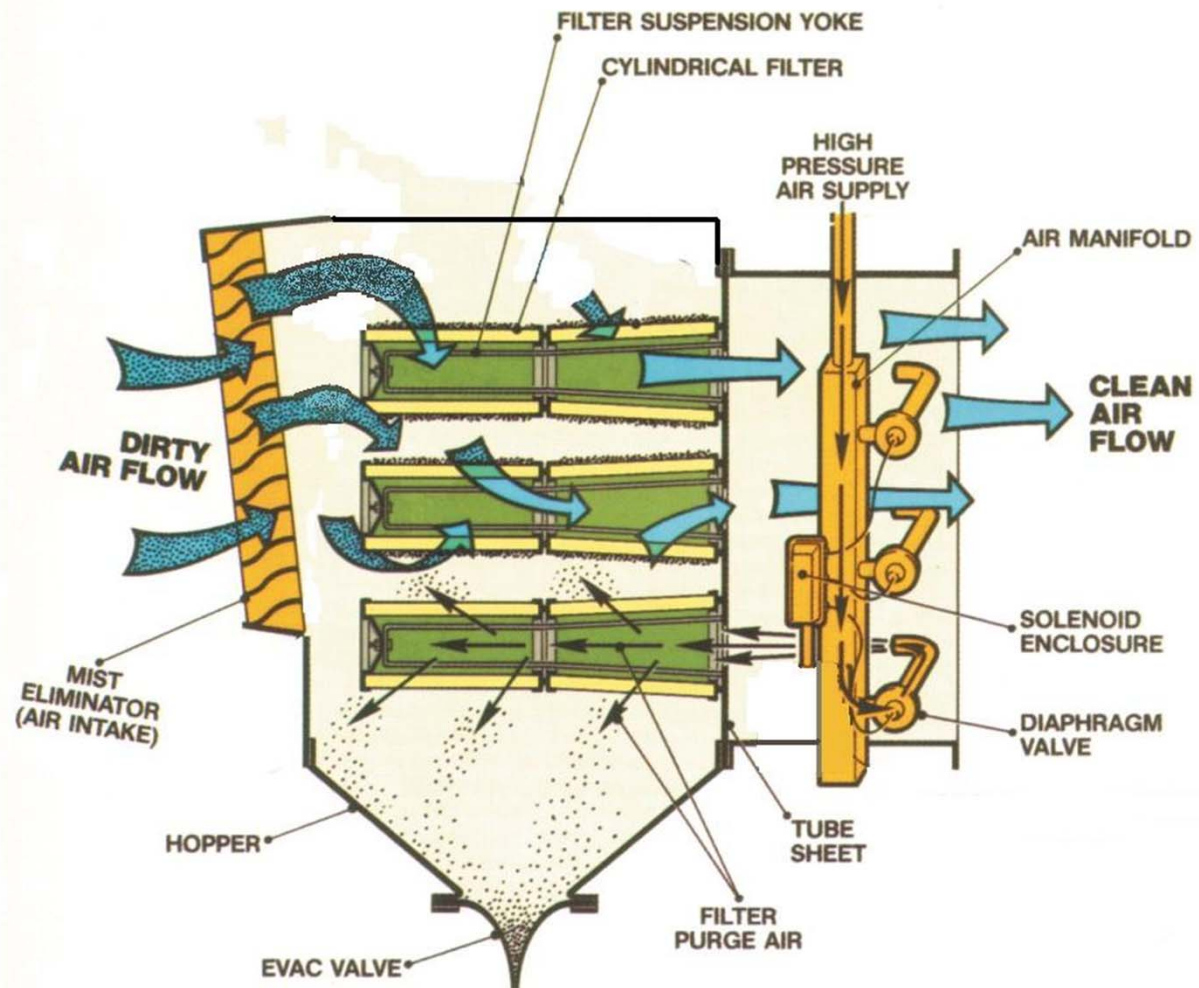
# COMPONENT DESCRIPTION

# COMPONENT DESCRIPTIONS

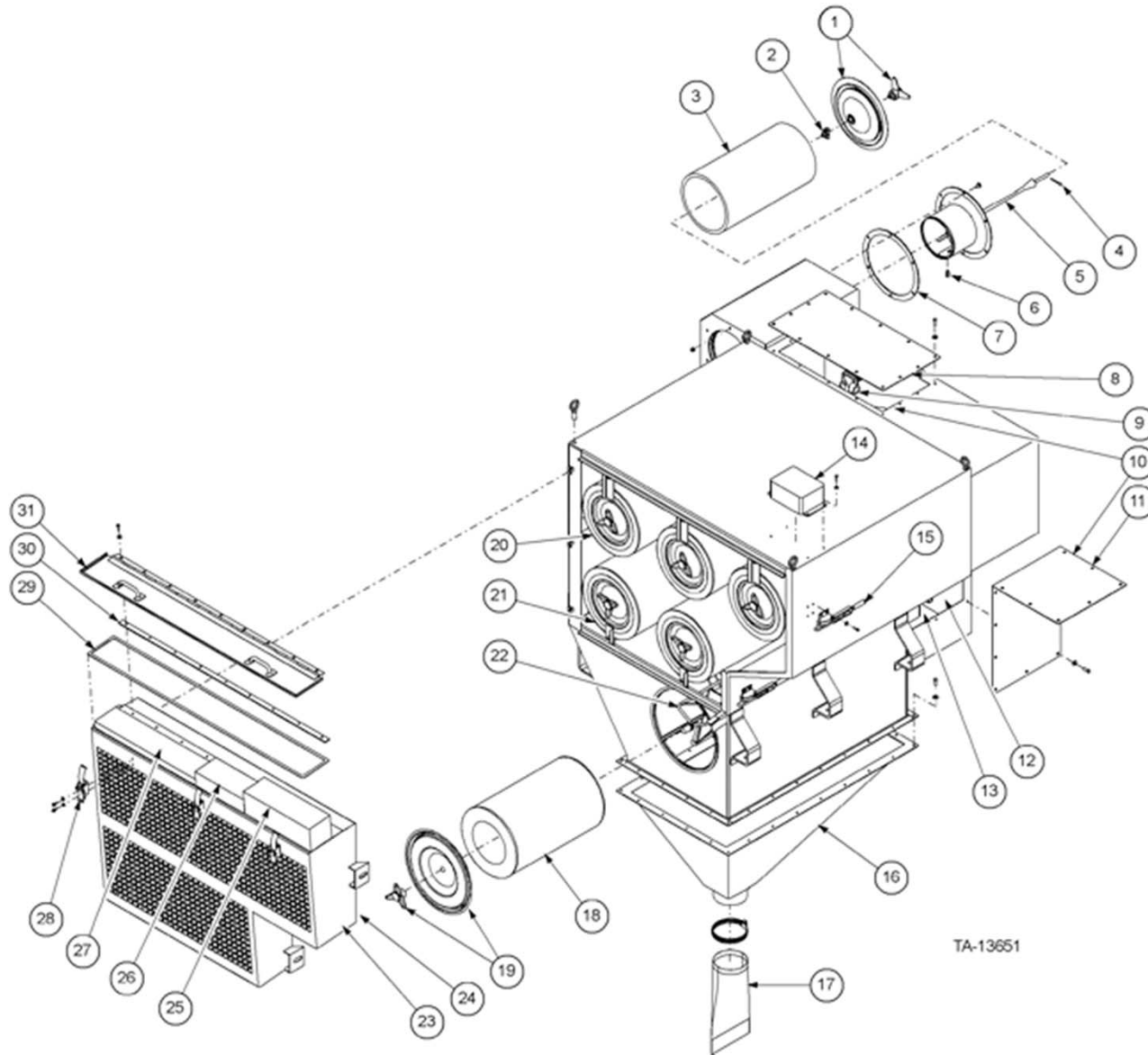
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- Klenz air cleaner
- Mist eliminators
- Filters
- Blower housing
- Blower motor
- Blower load adapter
- Blower ducting

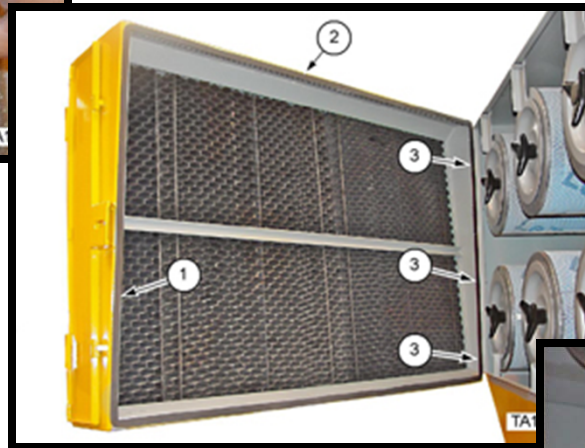
# KLENZ



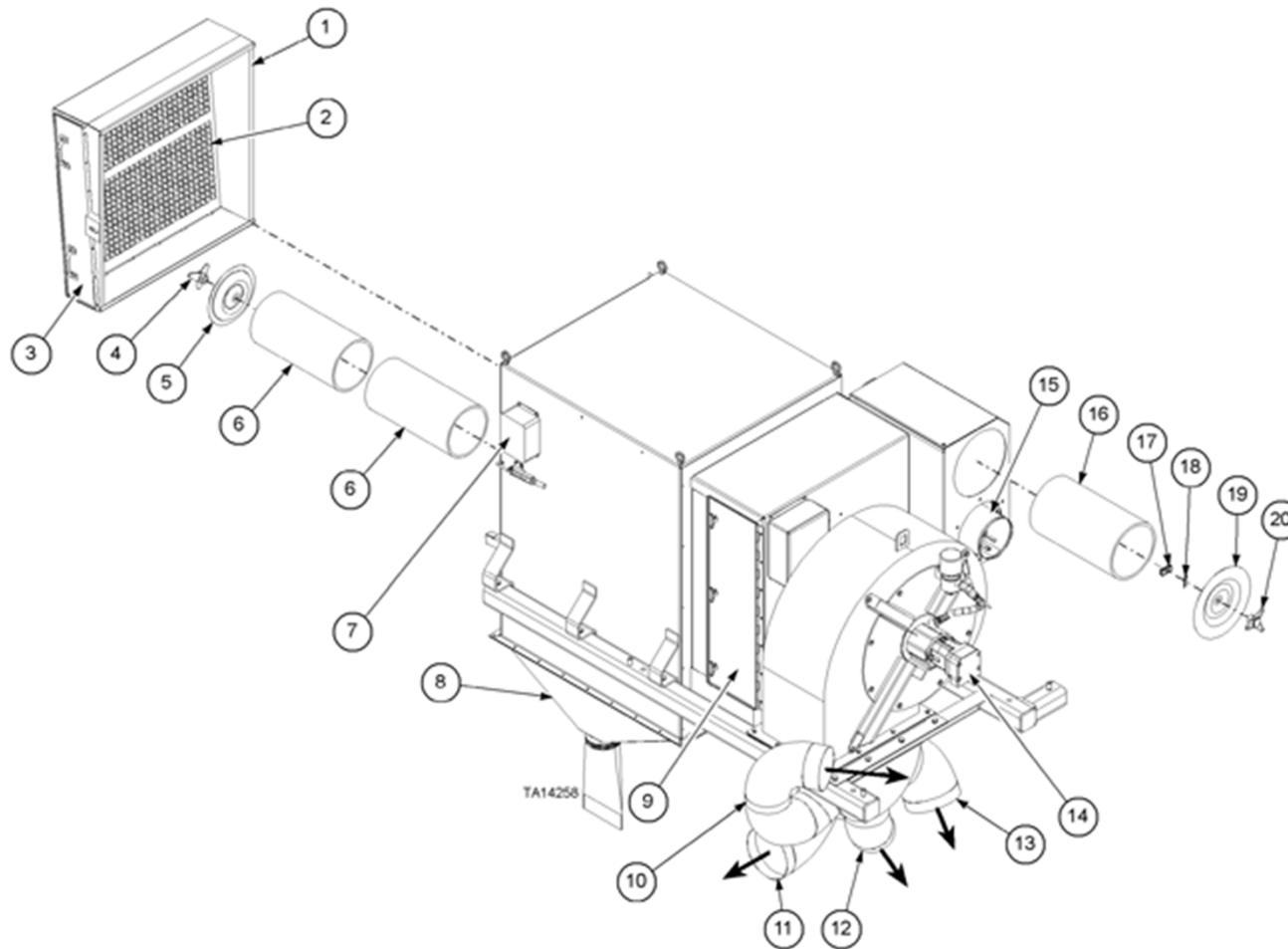
# KLENZ (EXPLODED VIEW)



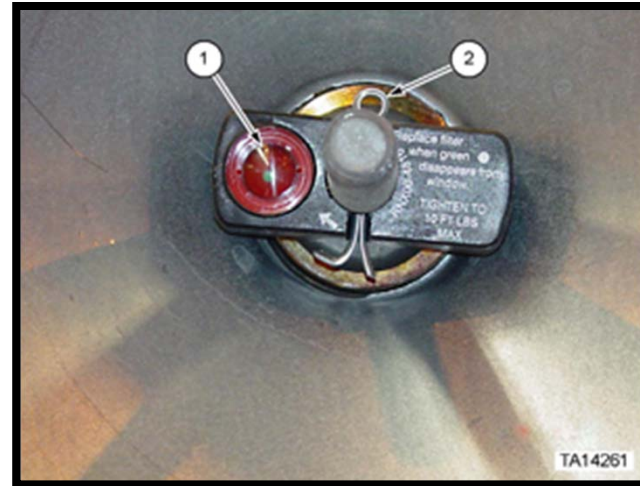
# MIST ELIMINATORS AND DUST CAPS



# BLOWER/KLENZ ASSEMBLY

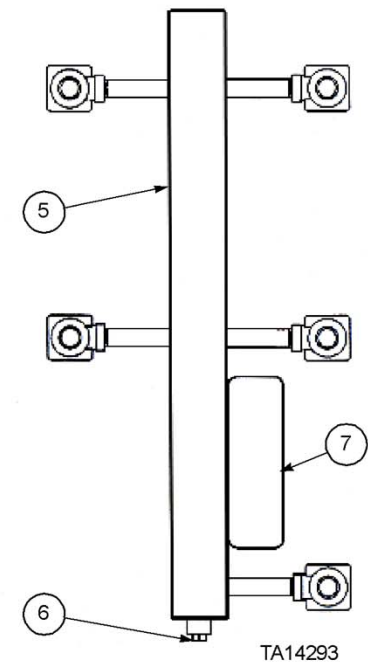
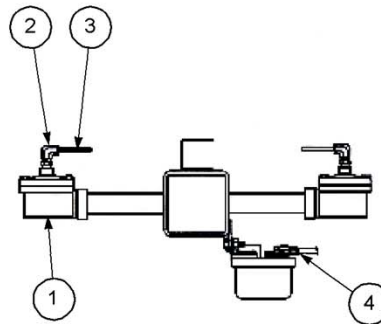
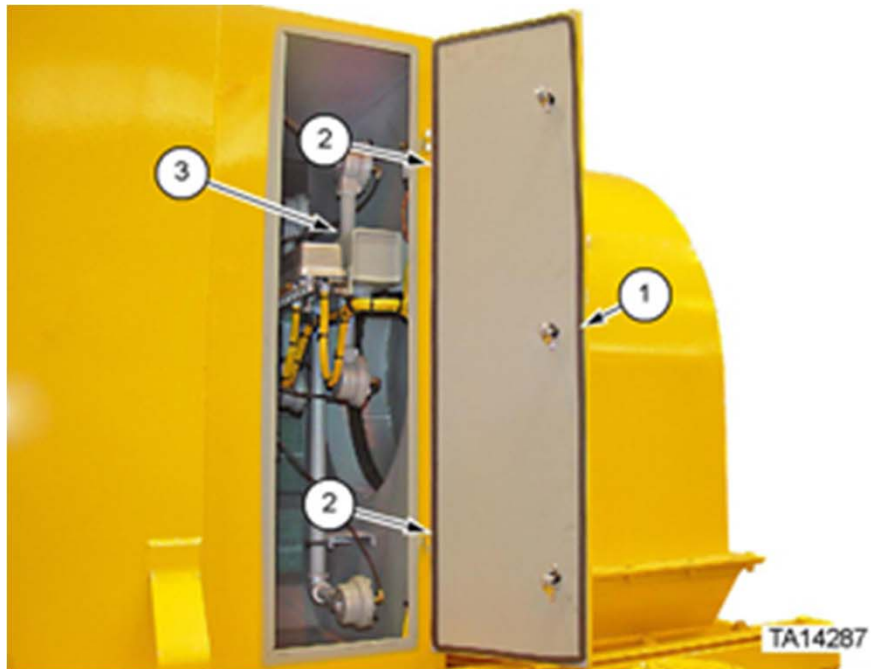


# KLENZ SAFETY FILTERS



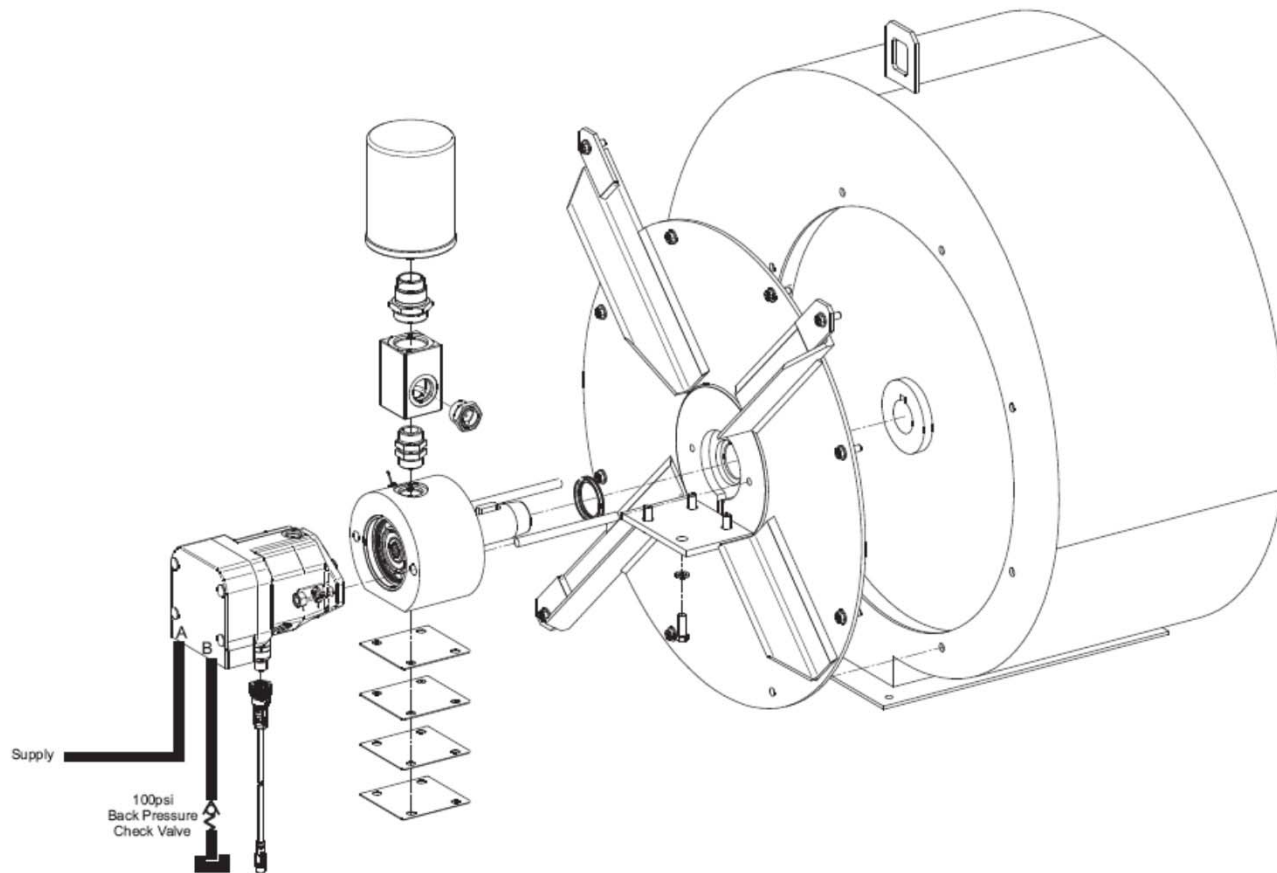


# PULSE VALVES



# BLOWER HOUSING

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# BLOWER WHEEL

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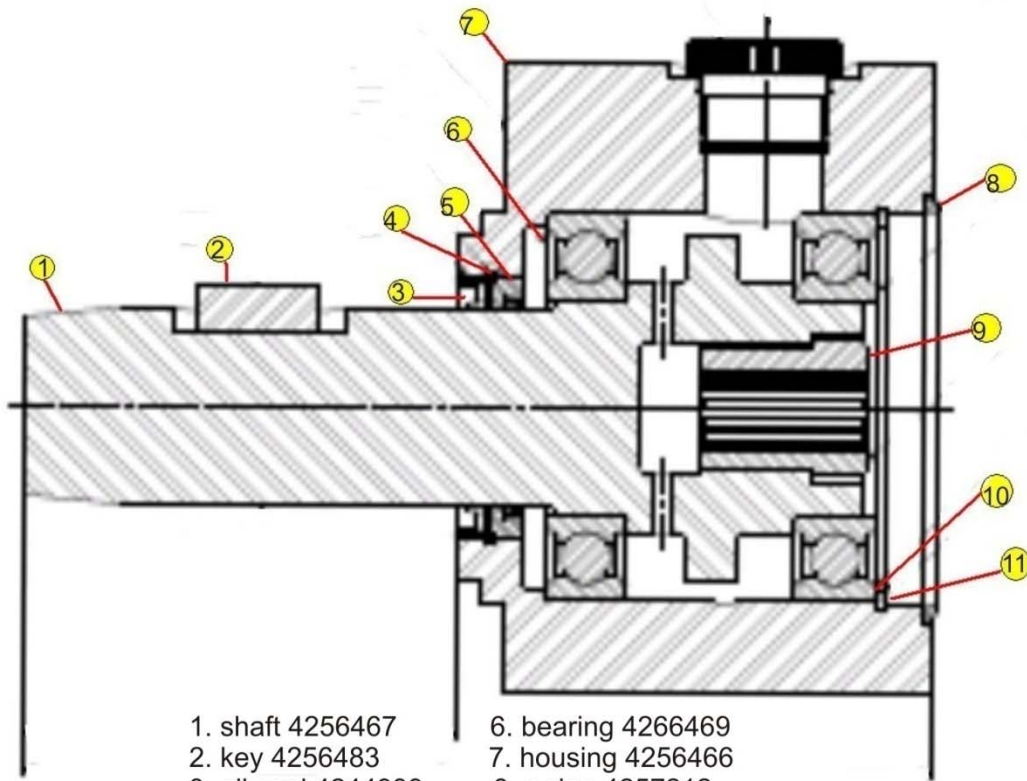


# BLOWER LOAD ADAPTER

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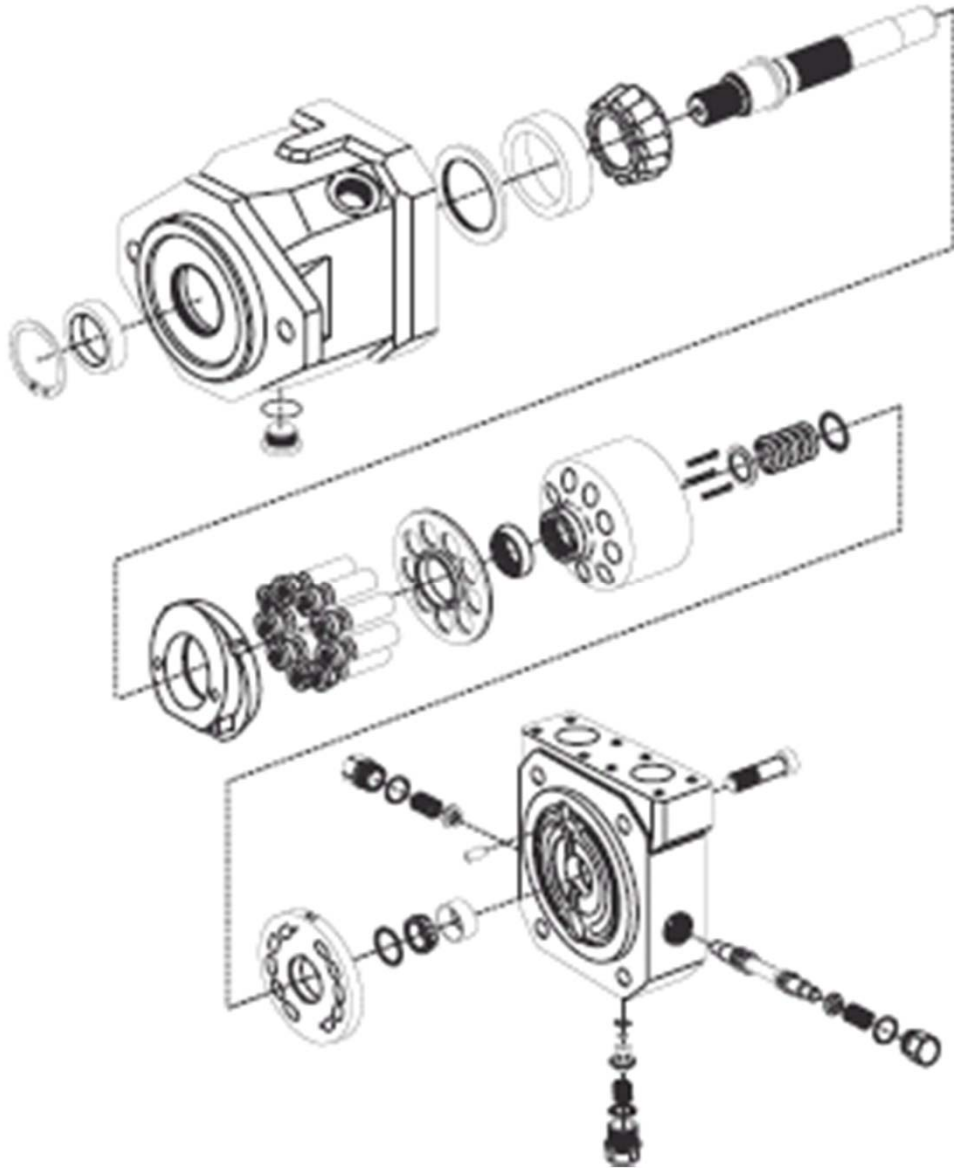
# BLOWER LOAD ADAPTER



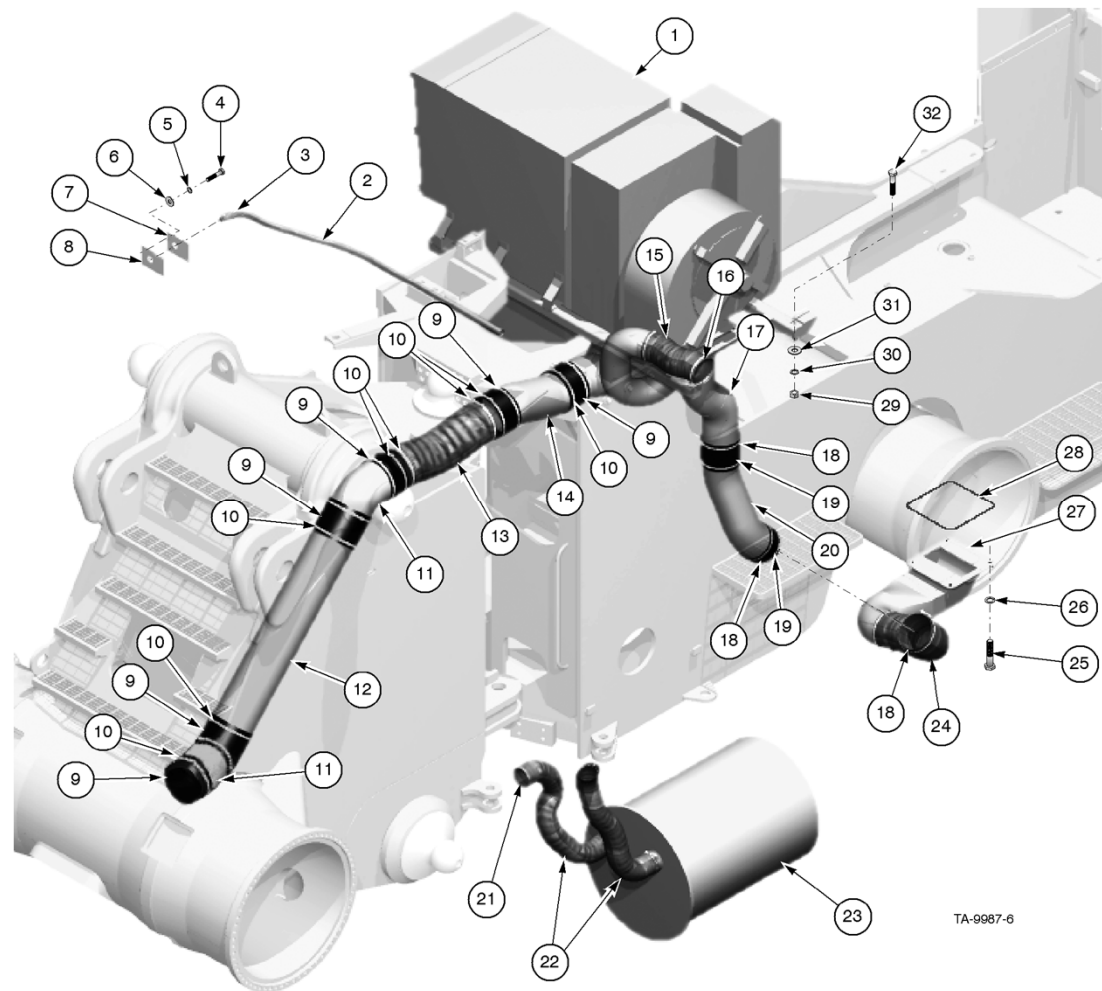
- |                      |                           |
|----------------------|---------------------------|
| 1. shaft 4256467     | 6. bearing 4266469        |
| 2. key 4256483       | 7. housing 4256466        |
| 3. oil seal 4244939  | 8. o-ring 4257212         |
| 4. snap ring 4147003 | 9. adapter sleeve 4256474 |
| 5. oil seal 4244938  | 10. shim 4264868          |
|                      | 11. snap ring 4147004     |



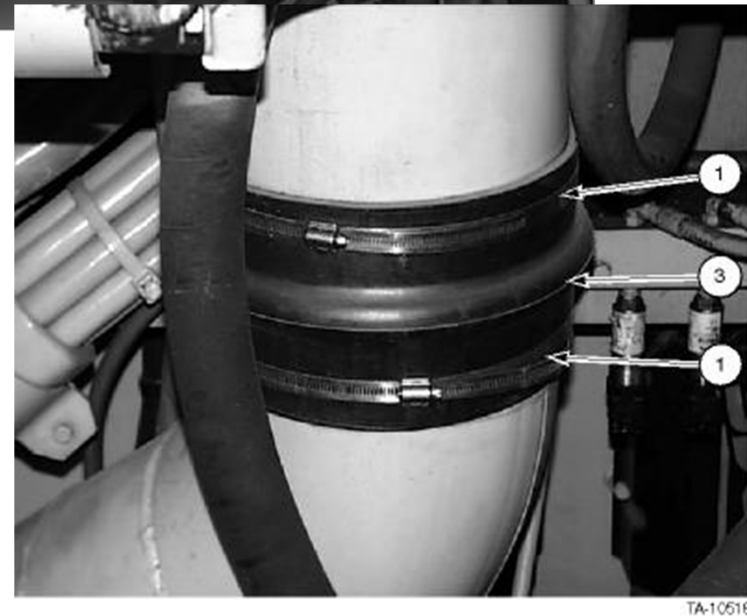
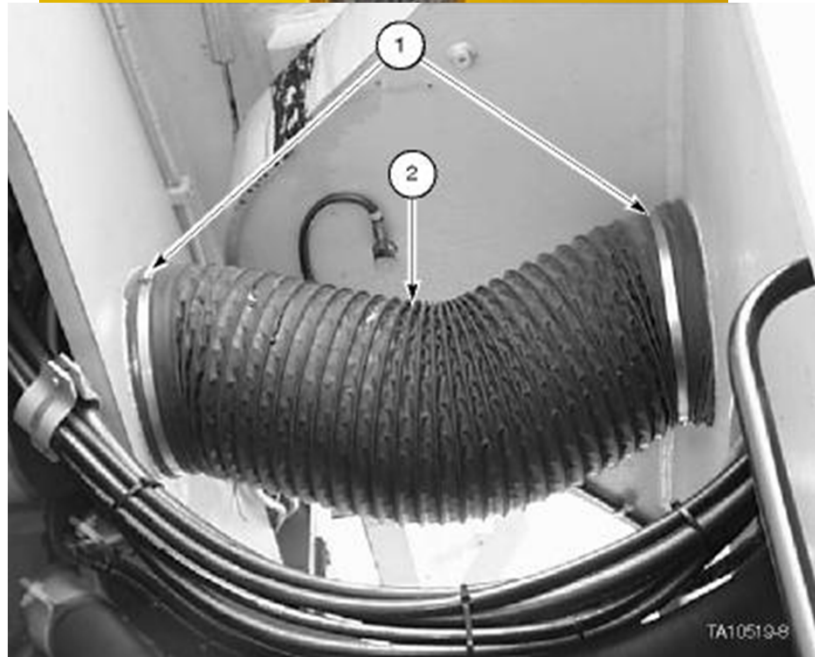
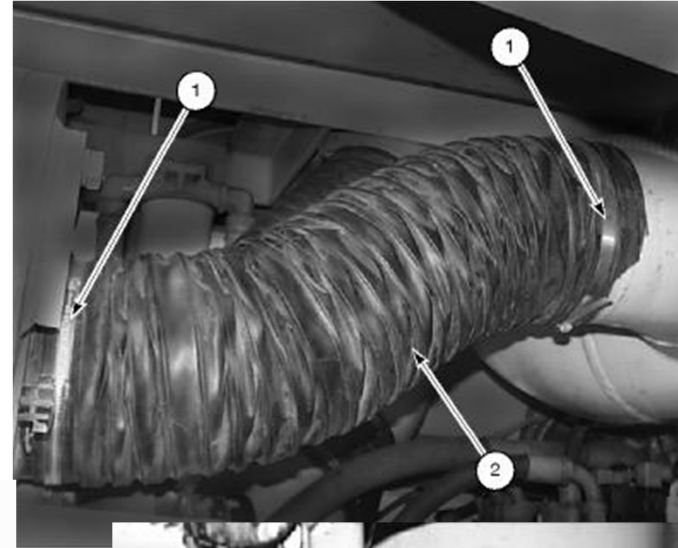
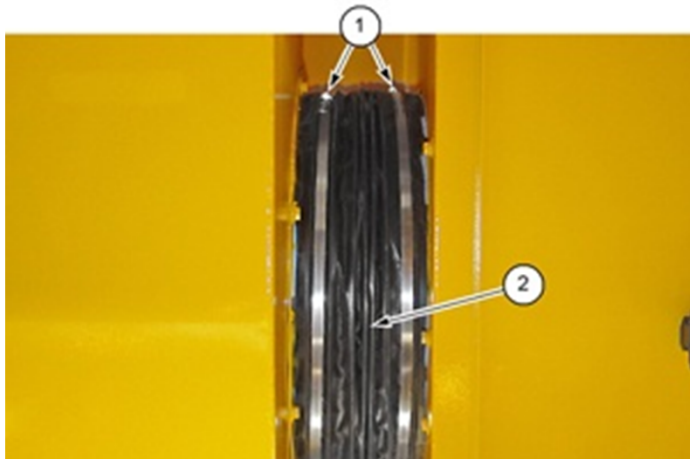
# BLOWER MOTOR



# BLOWER SYSTEM AIR DUCTING LAYOUT

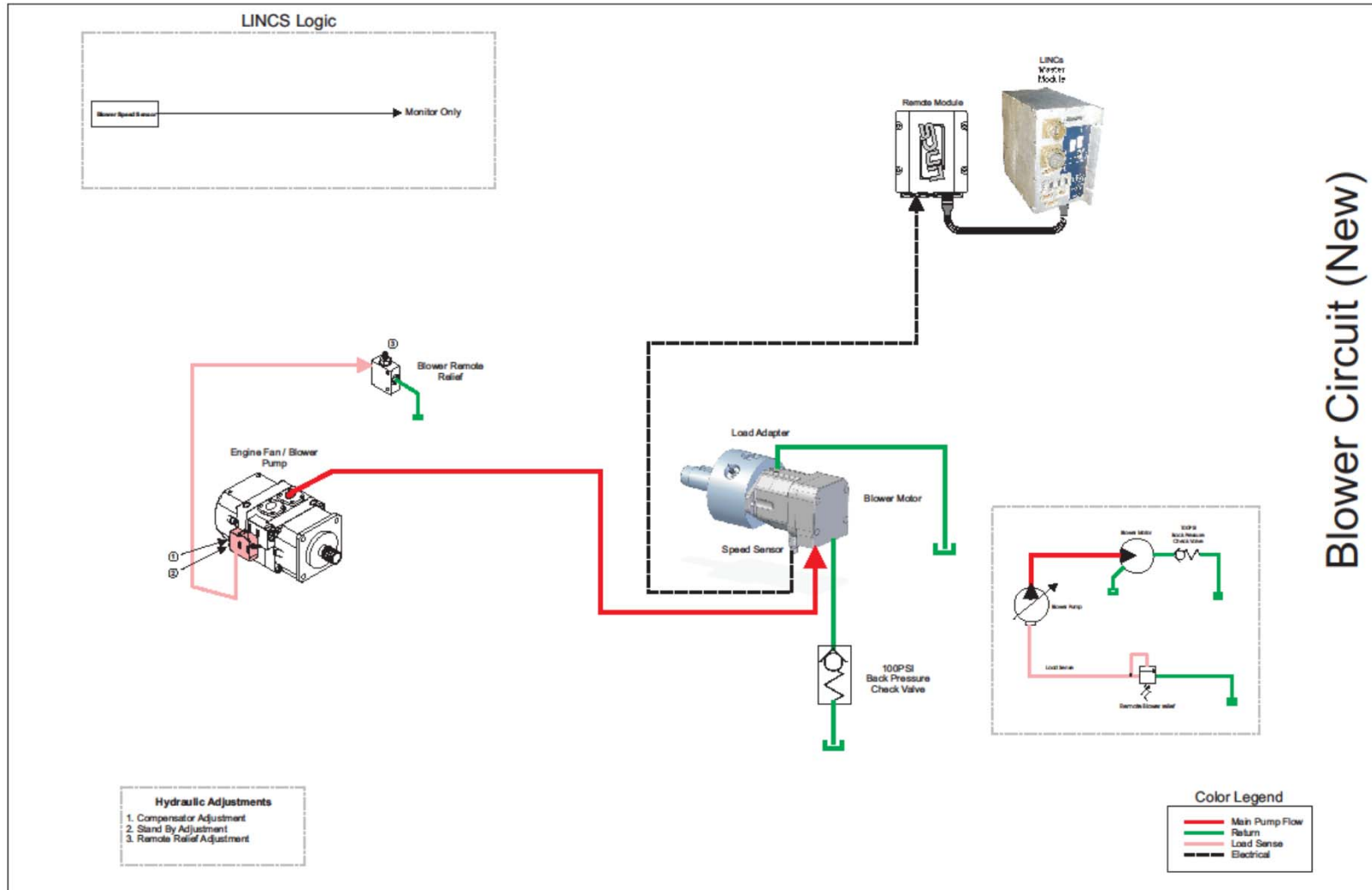


# BLOWER SYSTEM AIR DUCTING



# CIRCUIT DESCRIPTION

# BLOWER MOTOR CIRCUIT

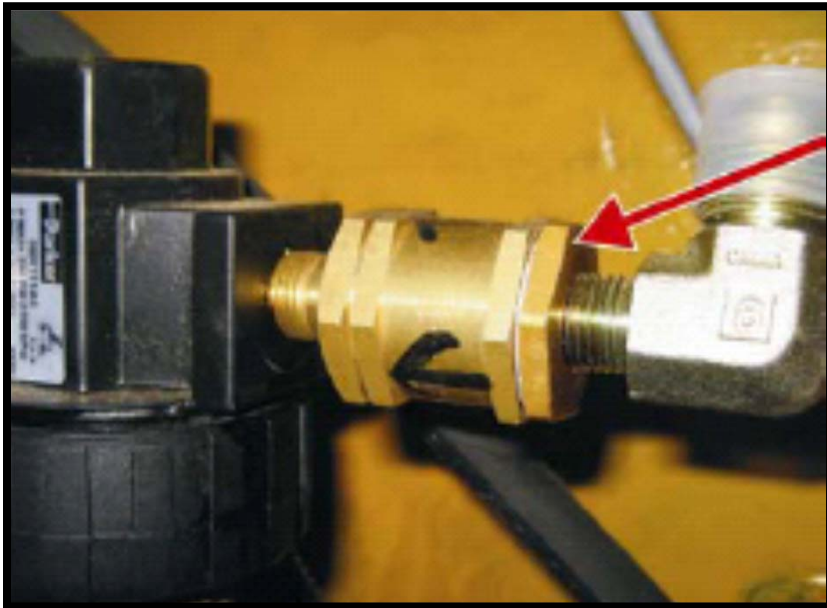


# SETTINGS & ADJUSTMENTS

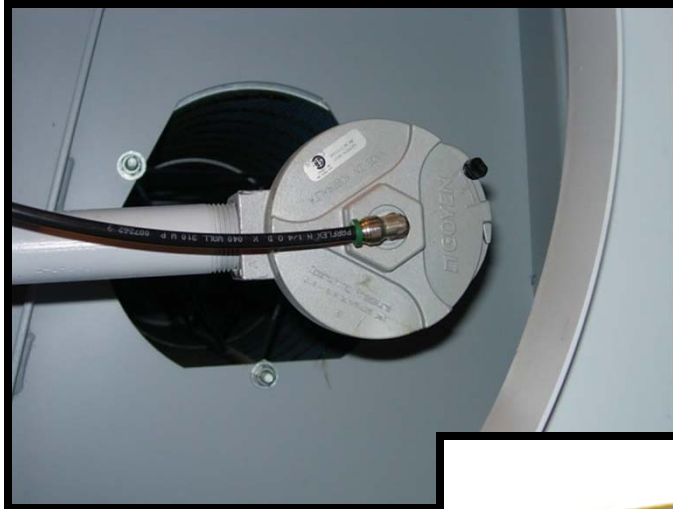
# 50 Series Setting and Adjustment Specifications

# KLENZ REGULATOR

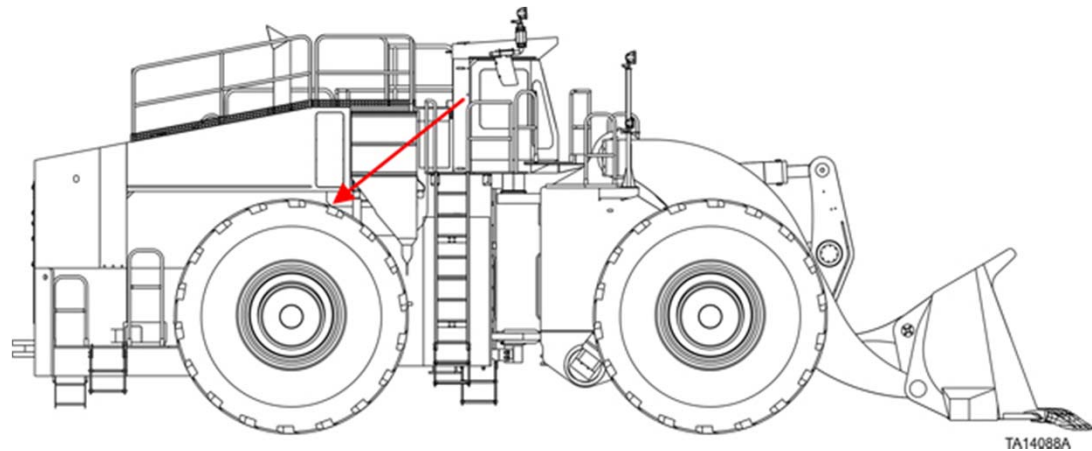
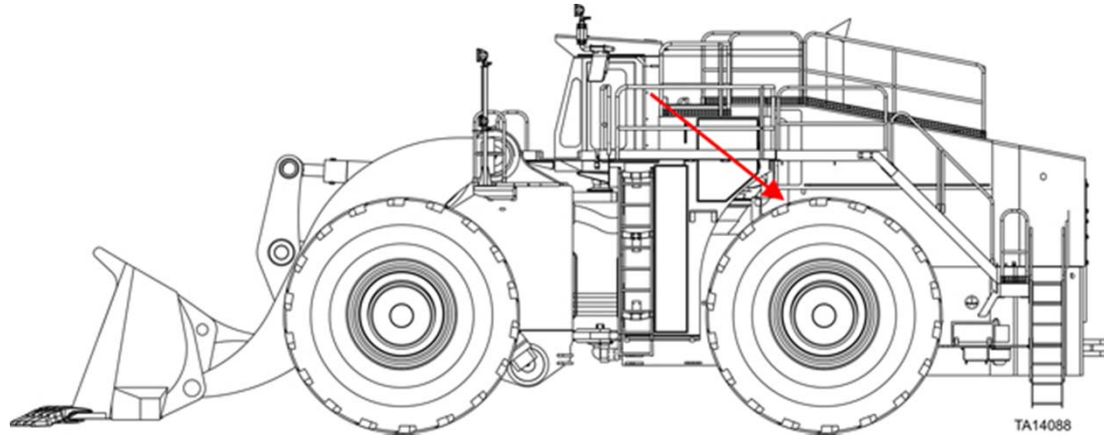
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# 500 HOUR INSPECTION



# SAFETY ELEMENT RESTRICTION INDICATORS



# KLENZ CHECK OUT SHEET

50 SERIES MACHINES										AIR SYSTEM			
KLENZ™ AND AIR INTAKE SYSTEM 500-HOUR INSPECTION AND SERVICE RECORD SHEET													
Date		Time		Model		Serial No.				Hours			
BEFORE & AFTER Filter Change	ENGINE RUNNING CHECKS - BEFORE & AFTER ANY FILTER CHANGES (IF NOT CHANGING FILTER, RECORD BEFORE ONLY)												
	KLENZ™ RESTRICTION (IN H <sub>2</sub> O)				BLOWER RPM		INLET RESTRICTION INDICATORS (IN H <sub>2</sub> O) - HIGH IDLE						
	Low Idle	High Idle	Low Idle	High Idle	#1 Top	#2 Mid Upper	#3 Mid Lower	#4 Bottom					
BEFORE													
AFTER													
KLENZ™ PULSE VALVES AND SOLENOIDS										PULSE TIMING			
KLENZ™ PULSE VALVE OPERATIONAL CHECKS - DO PULSE VALVES FUNCTION CORRECTLY? (YES / NO)										LINCS® TIME IN SECONDS			
Top Front	Top Middle	Top Rear	Center Front	Center Middle	Center Rear	Lower	Low Idle	High Idle					
PRIMARY FILTER INSPECTION & CHANGES													
KLENZ™ PRIMARY FILTER CONDITION - WAS FILTER CHANGED (OK / CHANGED)										The KLENZ™ Pulse Valves should emit a clearly audible "BOOM" whenever the LINCS® energizes the Solenoids.			
Top Front	Top Middle	Top Rear	Center Front	Center Middle	Center Rear	Lower							
SAFETY FILTER INSPECTION & CHANGES													
DO NOT REMOVE ANY SAFETY FILTER COVER UNLESS LINCS ALARM IS ACTIVATED.					#1 Top	#2 Mid Upper	#3 Mid Lower	#4 Bottom					
Filter Indicator Flag in Filter Retainer Nut Color (Red / Green)													
Safety Filter Nut Cotter Pins Installed (Yes / No)													
Safety Filter Changes													
Check Air Induction System Ducting and Mounts					Left Front	Left Rear	Right Front	Right Rear					
KLENZ™ End - Hose and Clamp Check (OK / Damaged / Repaired)													
Turbo End - Hose and Clamp Check (OK / Damaged / Repaired)													
Air Inlet Ducting and Supports Check (OK / Damaged / Repaired)													
PARTS REQUIRED, ACTION REQUIRED, REPAIRS COMPLETED													
COMMENTS													
INSPECTOR'S NAME (Print)						INSPECTOR'S SIGNATURE							

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SECTION 10 (MSWair®)  
50-SERIES MACHINES  
03-09-09

# TROUBLESHOOTING

# 50 Series Diagnostic Tool



**JOYGLOBAL**

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P&H Brand LeTourneau-Series  
wheel loader