

## OPTIMAX<sup>®</sup> Dual-Stage Precleaner Installation Kit for Caterpillar 24M Motor Grader

Sy-Klone part number: IN0070

### Purpose:

The OPTIMAX<sup>®</sup> Dual-Stage Precleaner ejects the majority of particles through the ejection slot in the first stage of the system. Remaining fine particulate is exhausted through the scavenger connection in the second phase of precleaning. This unit has been designed to perform well in extreme debris conditions such as landfill environments, providing dramatically extended filter life. While routine cleaning and maintenance is not required, it is recommended that you perform periodic inspections to ensure the ejection slot does not become blocked. See the Video Library on [www.sy-klone.com](http://www.sy-klone.com) for a demonstration.

### PRIOR TO INSTALLING OPTIMAX:

- The Optimax Dual-Stage Precleaner should always be installed with the machine turned off.
- If the machine already has the scavenging system equipped, verify suction coming from the system. You can use a rag or piece of paper to verify suction. Do not let go of the rag. If there is no suction the muffler scavenger is clogged or the muffler needs to be replaced.

**Caution:** If the muffler needs to be replaced, STOP the installation and recover, plug or reconnect the scavenger tube. Tell the customer of the problem. Finish installation after the muffler problem is corrected.

Check suction  
with a rag or  
piece of paper.



6H6 HUMP HOSE



OA09007 CHECK  
VALVE



AD0097 2" TEE  
ADAPTER

### Parts included in kit:

Stock code	Description	Quantity
OA11002	2" FLANGE ADAPTER	2
OA09011	2" P-CLAMP	6
OA09007	CHECK VALVE SILVER	1
OA09005	HOSE, EXHAUST - 2.0" ID	13.12FT
HWC0024	HEX HEAD BOLT 3/8- 16 X 1.25	8
HW0079	3/8 WASHER	16
XD49	SCREWS SELF-TAP #10X3/4 - BLACK	20
XD18	NNY37 Z 3/8"-16 NYLON INST LOC	8
AD0097	2" TEE ADAPTER	1
6H6	HUMP HOSE	2
KT0009	DVC KIT	2
9502-004	OPTIMAX DUAL-STAGE PCLNR	2
91300	CLAMP WORMGEAR 3.00 IN	10
91675W	CLAMP WORMGEAR 6.75 IN	4



9502-004  
OPTIMAX  
ASSEMBLY

### Technical Support

[www.sy-klone.com](http://www.sy-klone.com)  
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## OPTIMAX INSTALLATION:

1. Remove all existing intake components attached to the air cleaner housing.
2. Attach 6H6 hump hose to the air cleaner inlet and plug the evacuator port with the provided cap and clamp.



- 3) Cut down the provided 6 Inch rubber hump hose/sleeve to match height of bracket and attach to filter inlet.
- 4) Mount each 9502-004 Optimax Assembly to the hood and clamp to the hump hose. Holes will need to be drilled to bolt the Optimax base.



DRILL HOLES AND BOLT TO DECK

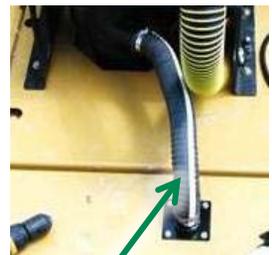
7. The two Optimax assemblies will look similar to the picture below once mounted.



8. Drill two 2-inch holes in the deck to mount the two OA11002 flange adapters. Install the flange adapters and secure each with the self tapping screws (XD49) to the hood. Then route exhaust hose from the two Optimax ports to each flange adapter. (Note: The exhaust hose will need to be cut to proper length.)



Flange Adapter



Exhaust Hose Routing

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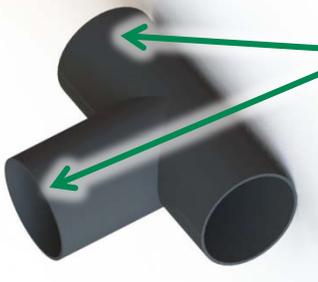
## OPTIMAX INSTALLATION CONTINUED:

- 9. Attach and clamp the exhaust hose to the under side of each flange adapter. (Note: The exhaust hose will need to be cut to proper length.)



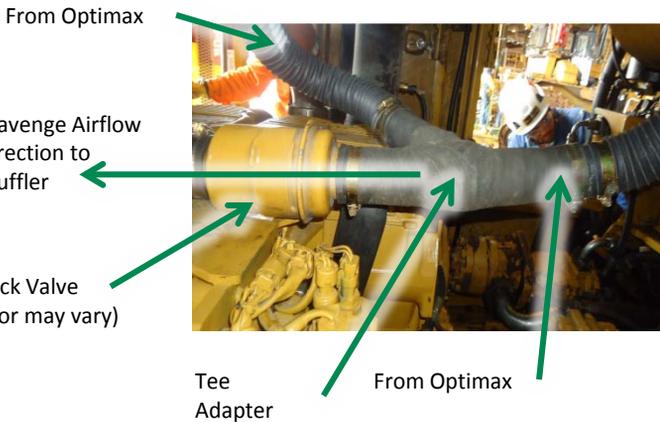
*Hose attached to underside of adapter*

- 10. The opposite end of each of the exhaust hoses will be attached and clamped to the tee adapter.



*Exhaust Hose Mounted to these ports from the flange adapter*

- 11. The remaining open port will be used to route the exhaust hose to a check valve and then to the muffler. The check valve will need to be mounted in the proper orientation.



- 12. The dual Optimax installation is now completed.

