
Air Intake

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Intake System

General

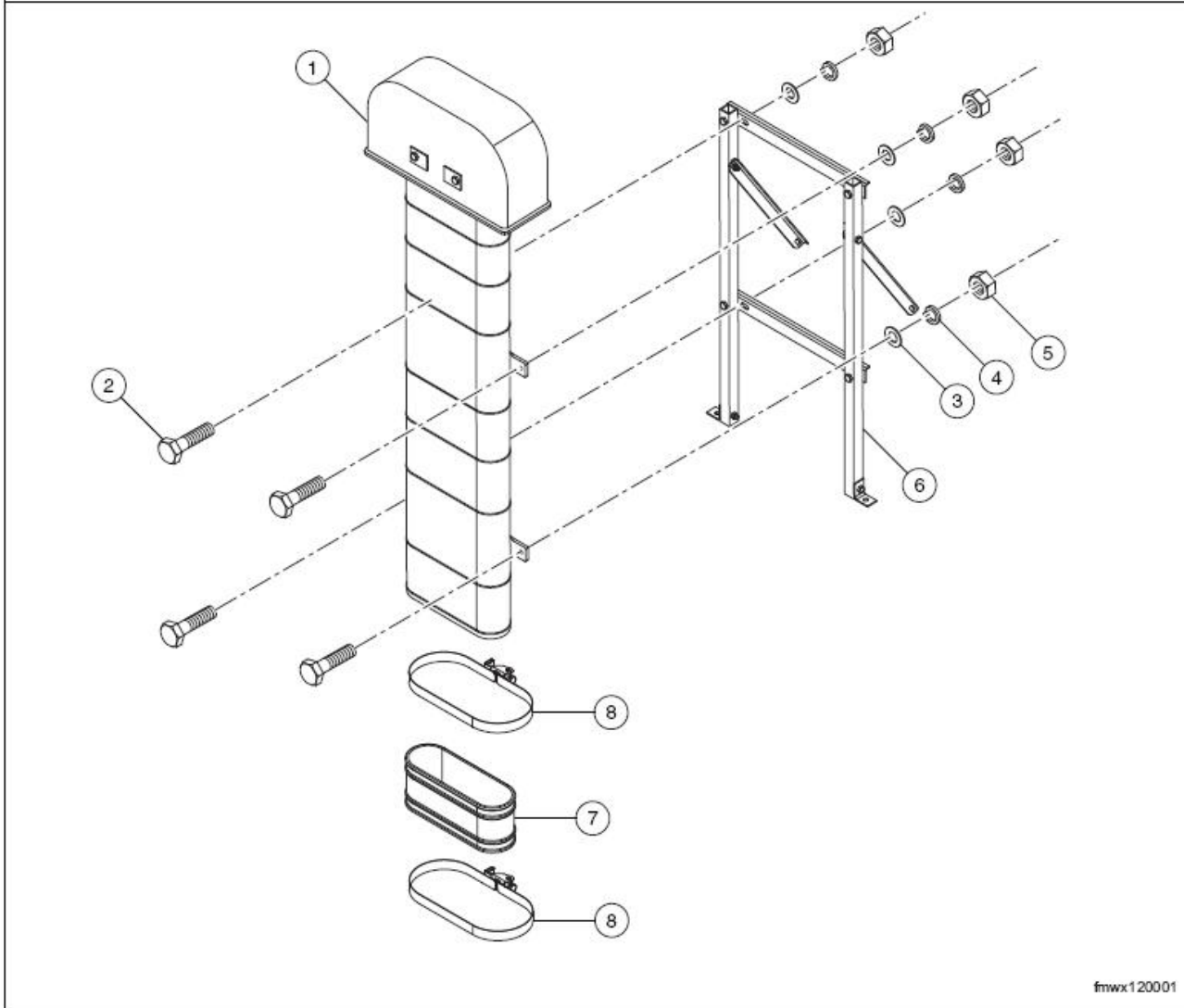
The vehicle adopts a tornadotron type desert two-stage air filter which comprises a housing, a tornadotron primary filter, a paper main filter element, a safety filter element, etc. The air filter has double filtration functions: the tornadotron primary filter can carry out first-stage filtration on most dust, the paper main filter element completes fine filtration, and the function of the safety filter element is to ensure the safety of the engine when the main filter element has accident damage. The filter is mainly suitable for air filtration of vehicles used in areas with serious dust.

Precautions

1. Engine intake must be filtered to prevent dirt and debris entering the engine. If the intake pipe is damaged or loosened, unfiltered air will enter the engine, and cause premature wear of the engine.
2. The joint of the air intake hose and the high-position intake pipe shall be firm, reliable without light leak, loose, etc.
3. The high-position intake pipe and the bracket shall be connected firmly and reliably without external cracks, and the joint of the air intake hose shall have no air leaks.
4. The maintenance cycle shall be properly shortened in areas with serious sand storm and dust.
5. In the process of maintenance, pay special attention to that the air exhaust part of the filter element shall not have secondary pollution.
6. If a non-original assorted filter element is used or the filter element is not maintained by maintenance methods, the filtration indices of the air filter can not be guaranteed.
7. Squeeze a dust exhaust bag to exhaust the dust deposit after travelling for one week and check whether the dust exhaust bag is in a good condition.
8. Clean periodically or when a plugging indicator light of the air filter is on; replace the outer filter element every year, or after repeatedly cleaning for six times, or when damage is found.
9. Inspect the tornadotron primary filter once every time after travelling for 500 hours (about two months).

High-position Intake Pipe

Part Drawing



fmwx120001

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1	High-position Intake Pipe Assembly
2	Hex Head Bolt
3	Flat Washer
4	Spring Washer

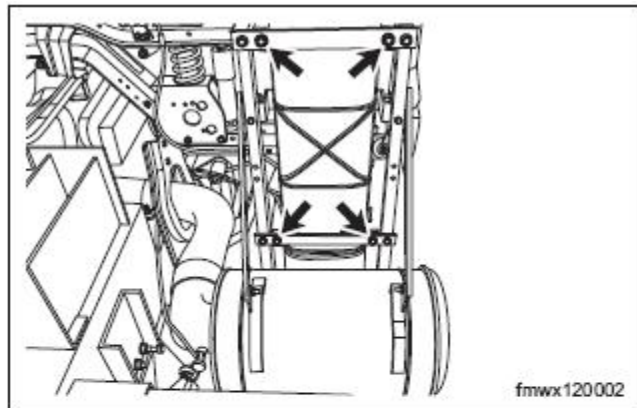
5	Hex Head Nut - Style 1
6	High-position Intake Pipe Bracket Assy.
7	Connecting Hose
8	Worm Drive Type Hose Hoop - Style A

High-position Intake Pipe

Replacement

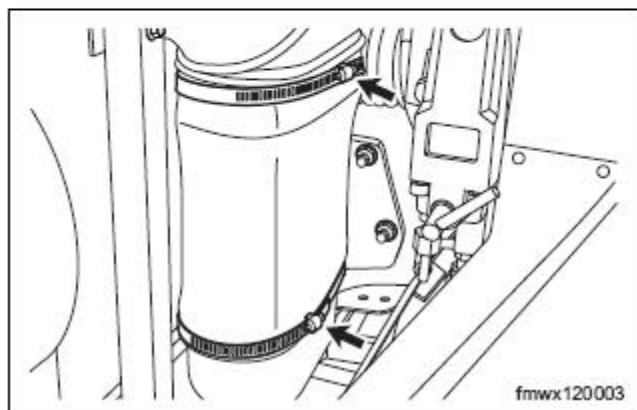
Hint:

Part Drawing, refer to Chapter 12, Intake - High-position Intake Pipe, Part Drawing.



1. Dismantle high-position intake pipe assembly

- (a). Dismantle the fixing bolt and nut of the high-position intake pipe assembly.



2. Dismantle connecting hose

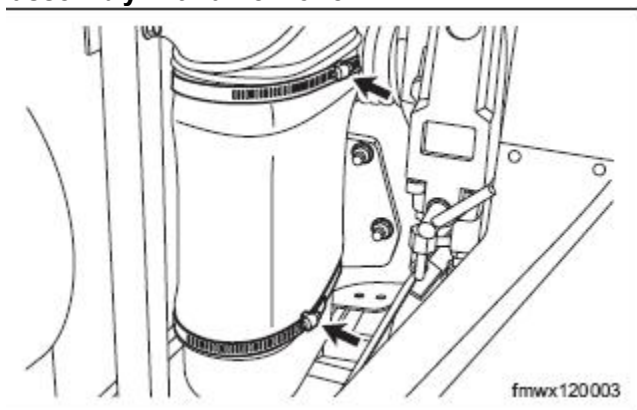
- (a). Loosen the hose hoop.

3. Inspect high-position intake pipe

- (a). Clean the high-position intake pipe and check for cracks, air leakage, etc.
- (b). Check for aging, cracks, air leakage, etc. of the connecting hose.

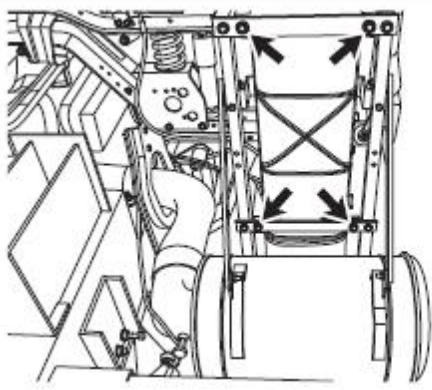
Caution:

If there is any abnormal condition, replace the high-position intake pipe and the connecting hose assembly with a new one.



4. Install connecting hose

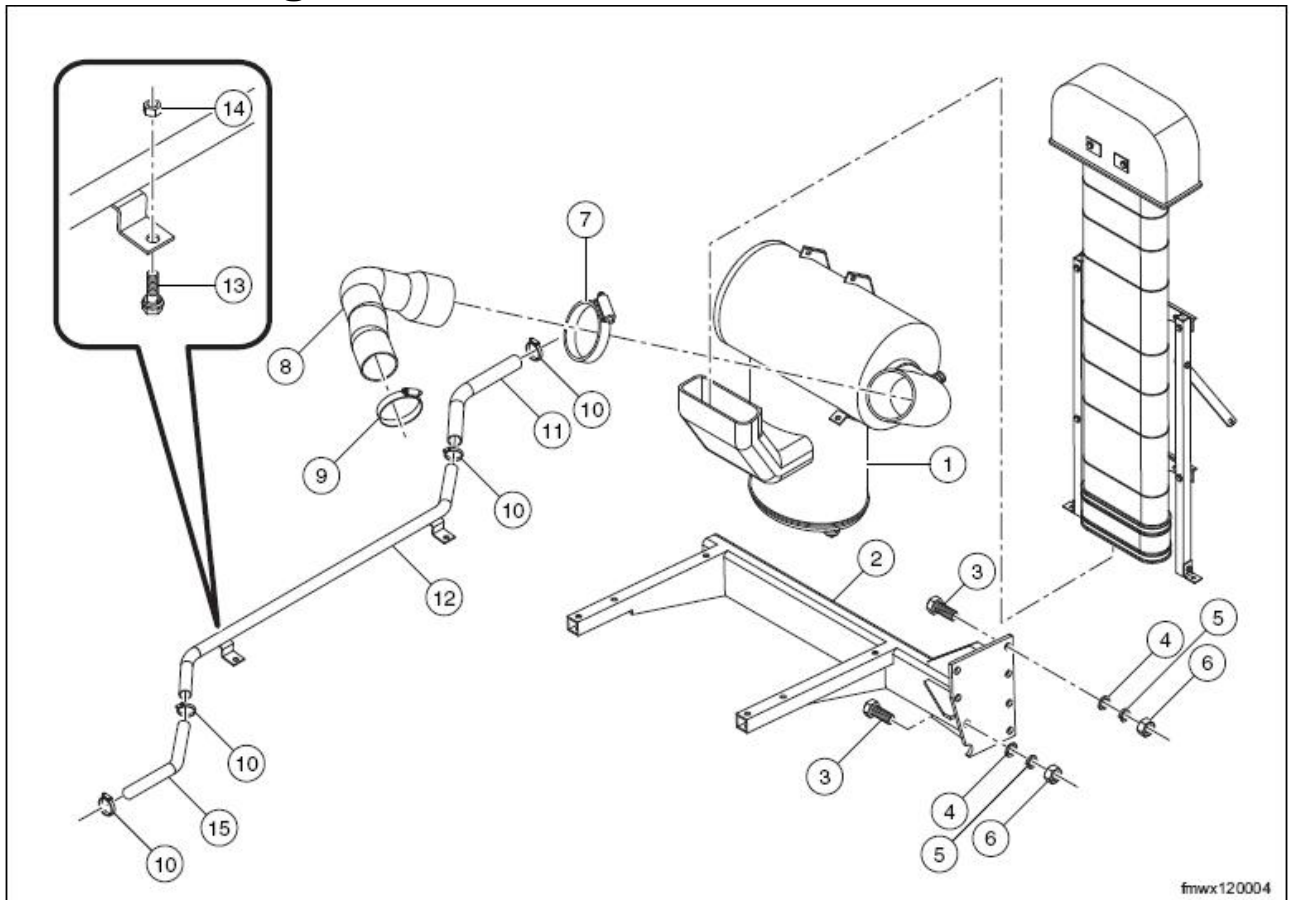
- (a). Tighten the hose hoop.



- 5. Install high-position intake pipe assembly**
(a). Install the fixing bolt and nut of the high-position intake pipe assembly.
Torque: 21~25N.m

Air Filter Assembly

Part Drawing



fmwx120004

1	Desert Air Filter Assembly
2	Desert Air Filter Bracket Assembly
3	Hex Head Bolt
4	Flat Washer
5	Spring Washer
6	Hex Nut - Style 1
7	Worm Drive Type Hose Hoop - Type A
8	Exhaust hose - Air Filter

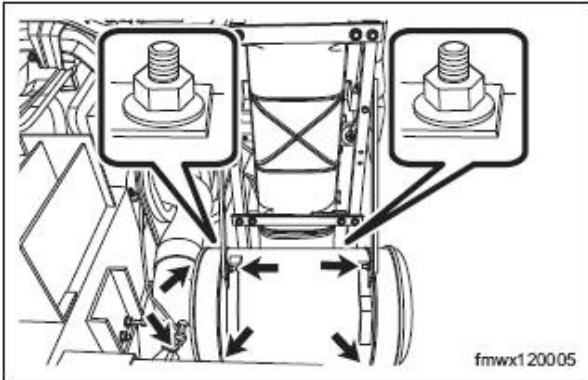
9	Worm Drive Type Hose Hoop - Style A
10	Worm Drive Type Hose Hoop - Style A
11	Intake Hose - Air Compressor
12	Intake Steel Pipe - Air Compressor
13	Hex Head Bolt, Spring Washer and Plain Washer Assy.
14	Hex Flange Face Nut
15	Intake Hose 1 - Air Compressor

Replacement

Hint:

Part Drawing, refer to Chapter 12, Intake - Air Filter Assembly, Part Drawing.

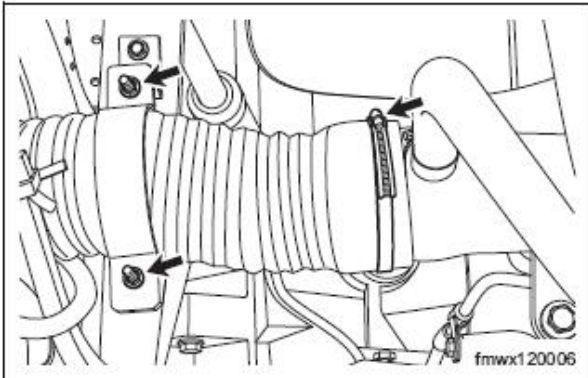
1. Turn off main power



2. Dismantle air filter assembly

(a). Dismantle the fixing bolt and nut of the air filter assembly.

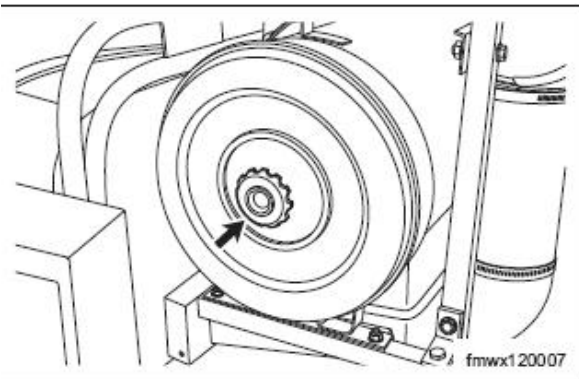
- Disconnect the connector assembly of the plugging alarm indicator light switch of the air filter.
- Loosen the exhaust hose hoop of the air filter.



(b). Dismantle exhaust hose of the air filter.

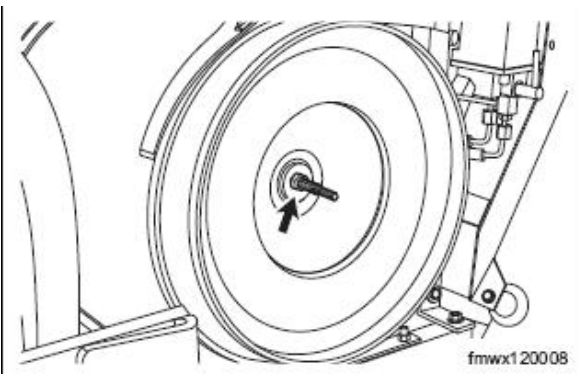
- Loosen the exhaust hose hoop of the air filter.
- Dismantle the fixing nut of the exhaust hose bracket of the air filter.

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3. Dismantle air filter assembly

(a). Dismantle the sealing dome handle of the air filter assembly.



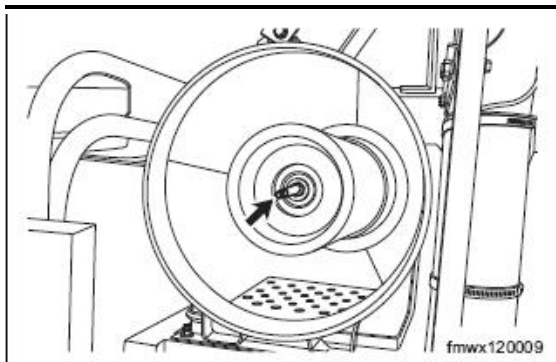
(b). Dismantle the fixing nut of the main filter element.

- Clean the main filter element with compressed air, and replace the main filter element if necessary.

Caution:

Do not drop dust on the safety filter element. Put on appropriate goggles and a face shield when using compressed air. Flying chipping and dirt may cause physical injury.

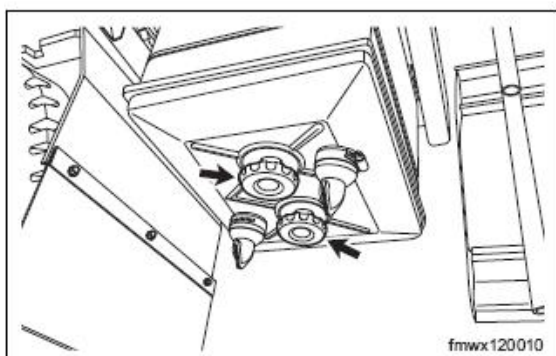
Intake – High-position Intake Pipe



- (c). Dismantle the fixing nut of the safety filter element.

Caution:

Check whether the safety filter element has pollution or damage, and if there is any abnormal conditions, replace the safety filter element with a new one.

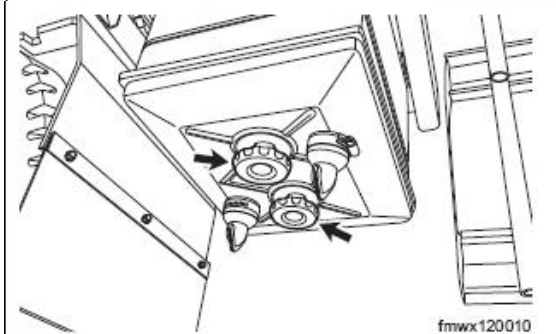


- (d). Dismantle the sealing square cover handle below the air filter assembly.

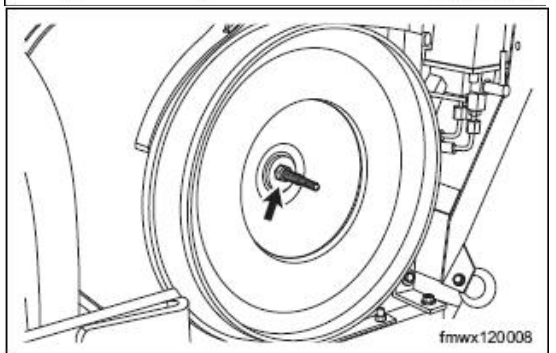
- Squeeze the dust exhaust bag to exhaust the dust deposit, and check whether the dust exhaust bag is in a good condition.
- Clean dust deposit of each position with compressed air.

Caution:

Plug the air outlet with a clean object. Put on appropriate goggles and a face shield when using compressed air. Flying chipping and dirt may cause physical injury.

**4. Assemble air filter assembly**

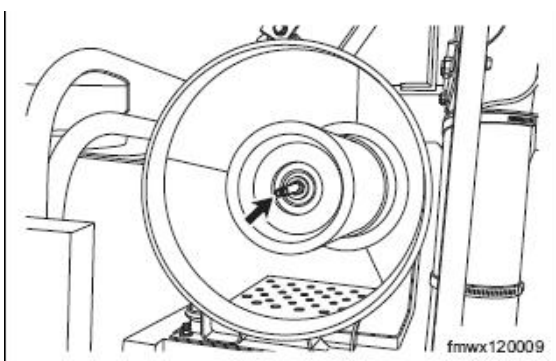
- (a). Install the sealing square cover handle below the air filter assembly.



- (b). Install the fixing nut of the safety filter element.

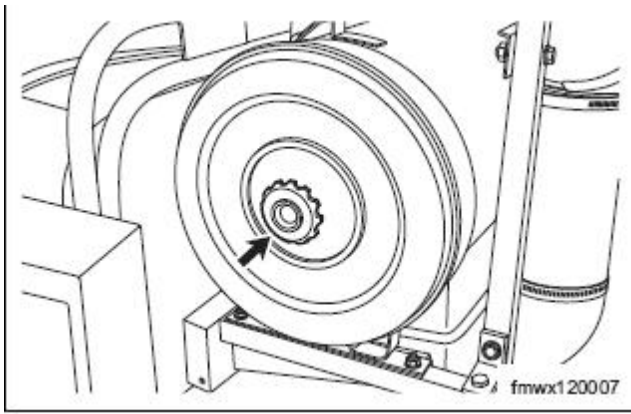
Torque: 41~51N.m

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- (c). Install the fixing nut of the main filter element.

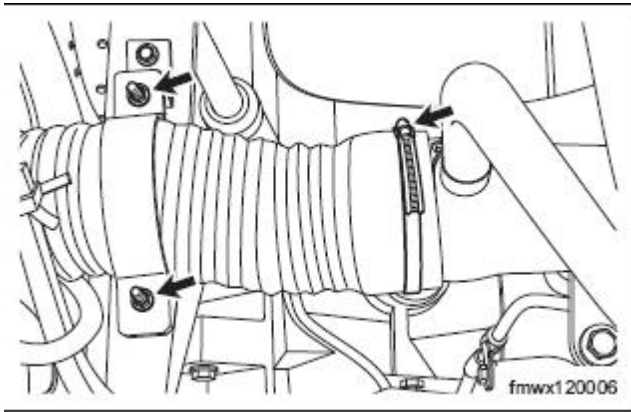
Torque: 41~51N.m



(d). Install the sealing dome handle of the air filter assembly.

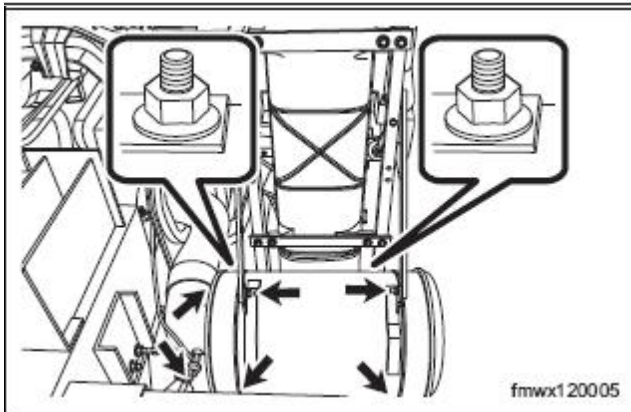
Caution:

After assembling the air filter assembly, check whether the sealing is good without lose and air leakage.



5. Install air filter assembly

- (a). Install the exhaust hose of the air filter.
- Screw down the exhaust hose hoop of the air filter.
 - Install the fixing nut of the exhaust hose bracket of the air filter.



- (b). Install the fixing bolt and nut of the air filter assembly.
- Screw down the exhaust hose hoop of the air filter.
 - Connect the connector assembly of the plugging alarm indicator light switch of the air filter.

6. Turn on the main power