

# CLARK

# Service gram

9 October 1974

MICHIGAN SG-413A  
Group Ref. No. 100

(This bulletin supersedes and replaces SG-413, dated 3 December 1974.  
REASON: Updated to include Model 110-9 installation).

SUBJECT: Air Cleaner Assembly  
Models 475-111A, 275A (425A Series)  
380-111A, 175B, 175-111A, 110-9

An improvement change has been made in the air cleaner assemblies used on the above models. This change consists of addition of a second or safety filter element inside of the primary filter element in the air cleaner assembly. Addition of the safety element is an added "insurance policy" which protects the engine in case of damage to the primary element. It also guards the engine during cleaning of the primary element.

This change became effective in machines shipped from the factory with the following serial numbers:

<u>Model</u>	<u>Effective S/N's</u>
475-111A	421E291, 421E294, 421E354, 421E363, 421E371, 421E372, 421F101, 421F105, 421F107 thru 421F111, 421F113 thru 421F115, 421F122 & after
275A	425A361CAC & after
380-111A	418A317CAC & after
175B	427A124, 427A128, 427A130, 427A133 thru 427A135, 427A141 thru 427A143, 427A145, 427A147, 427A148, 427A150, 427A155, 427A156, 427A161, 427A166, 427A168 & after
110-9	222B105 & after

NOTE: The Model 175-111A is no longer in production, and therefore, this subject is a recommended addition to machines in the field as covered below.

The above described change may be incorporated, if desired, in machines in the field prior to the above listed serial numbers. The addition of the safety element is a relatively simple operation and it is strongly recommended that this addition be made to existant machines in the field at the earliest opportunity in order to obtain the added protection to the engine that it affords.

PARTS REQUIRED (per air cleaner assembly):

- \*2 - 949363 Element, Safety Filter
- \*\*1 - 993689 Element, Safety Filter
- \*2 - 3292703 Nut Assy

NOTE: Model 110-9 uses 1 - 3292703 Nut Assy

- \*Two pcs. on all models except 175B & 175-IIIA which require 1 pc. each.
- \*\*Used on Model 110-9

INSTALLATION INSTRUCTIONS (Ref. Fig. 1):

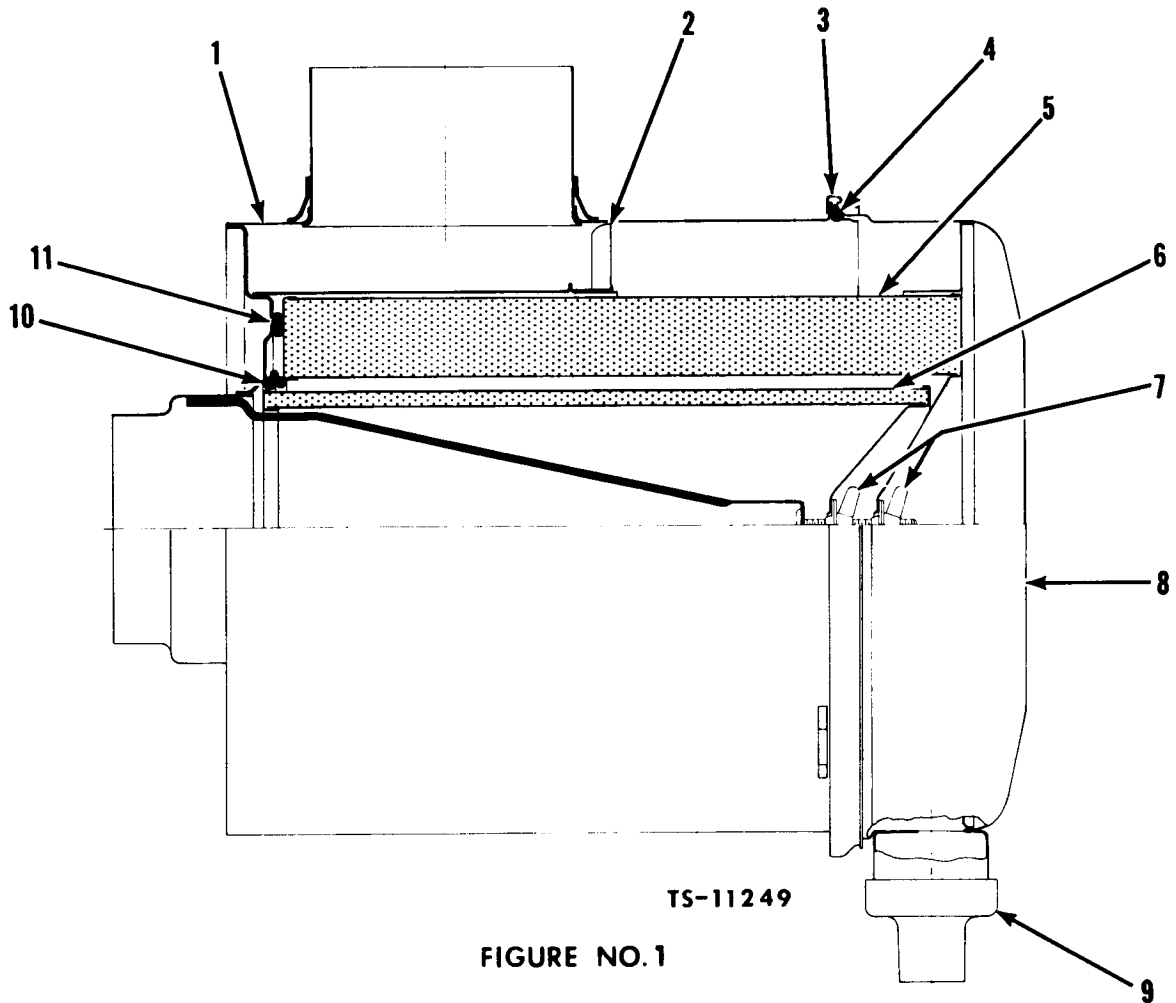
1. Loosen band assembly retaining dust cup in place and remove dust cup. Empty and clean dust cup. Check the vacuator valve to see that it is not damaged or plugged.
2. Remove wing nut retaining primary filter element and remove element. NOTE: For minimum machine downtime, it is recommended primary element be cleaned or replaced at this time.
3. Insert 949363 or 993689 Safety Element into filter body and install 3292703 Nut Assy and tighten. Be sure end of element containing sealing ring is installed first. Then, wipe inside of filter body with damp cloth. Check precleaner fins for plugging. DO NOT clean inside of filter body until safety element is in place.
4. Reinstall primary filter element with end containing seal ring going into filter body first. Reinstall wing nut and tighten.
5. Reinstall dust cup assembly, making sure o-ring seal is in place and that it seals 360° around the air cleaner body.

SERVICE NOTE:

PRIMARY ELEMENT - It is recommended this element be replaced after six (6) cleanings or annually, whichever occurs first, Damaged elements should be replaced immediately.

SAFETY ELEMENT - The safety element is not intended to be cleaned. For maximum engine protection and air cleaner service life, replace the safety element with a new element every third primary element change or once a year, whichever occurs first.

SPR-74078



- |                     |                                            |
|---------------------|--------------------------------------------|
| 1. Air Cleaner Body | 6. Safety Element                          |
| 2. Precleaner Fins  | 7. Wing Nuts                               |
| 3. Band Assy.       | 8. Dust Cup                                |
| 4. O-Ring           | 9. Vacuator Valve                          |
| 5. Primary Element  | 10. Sealing Ring (Part of Safety Element)  |
|                     | 11. Sealing Ring (Part of Primary Element) |

# CLARK

# Service gram

7 April 1976

MICHIGAN SG-592  
Group Ref. No. 100

SUBJECT: Exhaust System Revision  
Model 175B Cummins

An improvement change has been made on Model 175B machines featuring a new exhaust piping arrangement, which is designed to alleviate the possibility of water draining down the exhaust tube into the engine. This change became effective on machines shipped from the factory with serial number 438C183 and after.

This improvement may be made, if desired, on Model 175B Cummins machines shipped from the factory with serial numbers prior to 438C183, by ordering parts listed below and installing them in accordance with the following instructions.

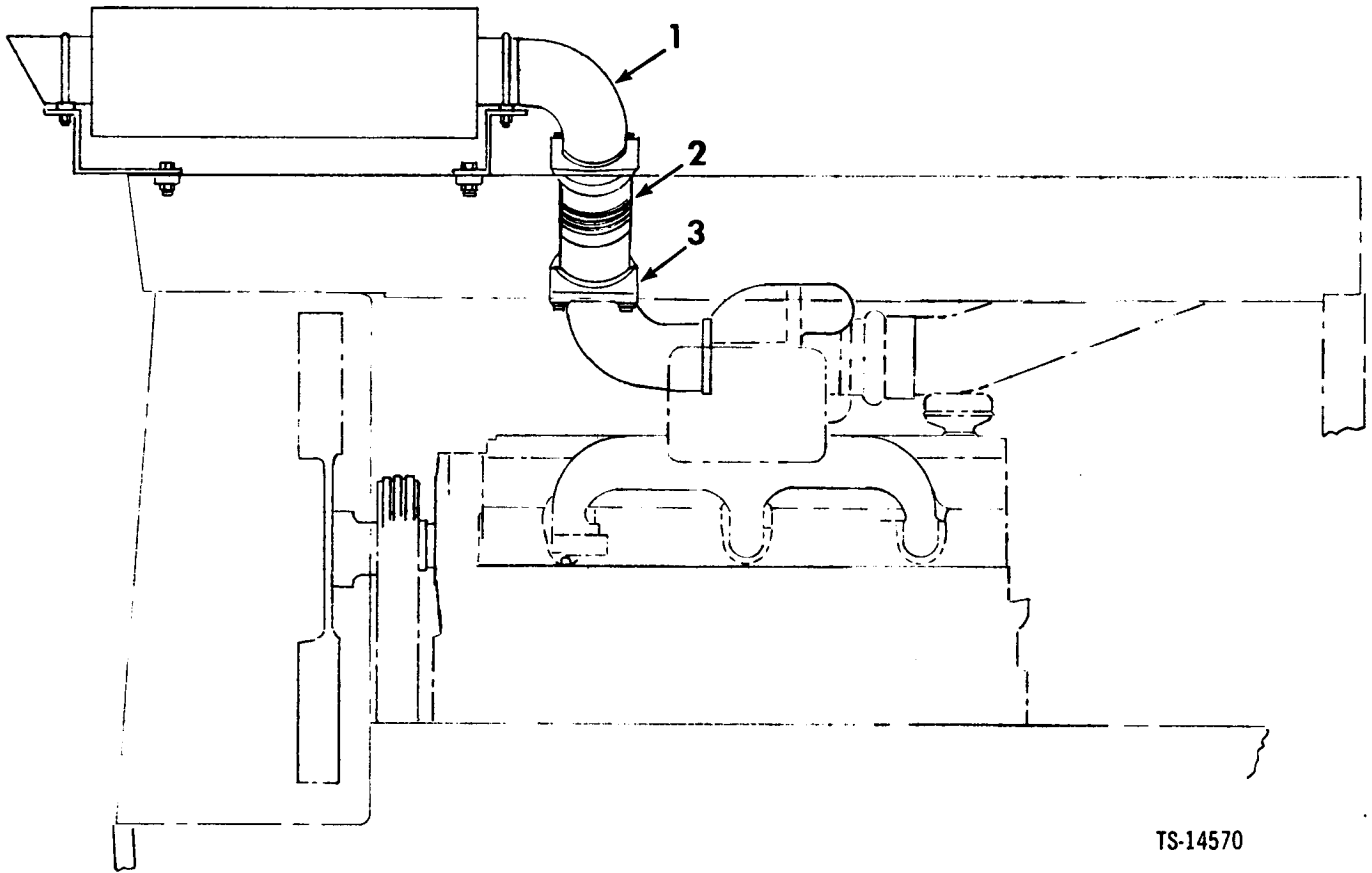
#### PARTS REQUIRED (Per machine):

1 - 2514482 Exhaust Tube Assembly  
1 - 2503988 Exhaust Elbow

#### INSTALLATION:

1. Remove existing 1511798 Exhaust Elbow and 2512511 Exhaust Tube Assembly, and 1529986 Clamp Assemblies. Retain 1529986 Clamp Assemblies for re-use if they are in suitable condition.
2. Install 2514482 Exhaust Tube Assembly and 2503988 Exhaust Elbow as shown in Figure 1, using existing 1529986 Clamp Assemblies, or new 1529986 Clamp Assemblies if required.

ECN 49975



TS-14570

Figure 1

Exhaust Piping

- (1) 2503988 Exhaust Elbow
- (2) 2514482 Exhaust Tube Assembly
- (3) 1529986 Clamp Assembly

# CLARK

# *Service gram*

4 August 1978

MICHIGAN SG-711  
Group Ref. No. 100

SUBJECT: Spark Arresters  
All Models

Some states and local ordinances may require Spark Arresters on machines used on or near forest-covered, brush-covered, or grass-covered lands. The U.S.D.A. Forest Service requires Spark Arresters on machines operating on National land.

Use of machines in such areas may be in violation of law and make the user subject to damages and costs of fire suppression.

Spark arresting equipment must be installed on any machine which might operate in such areas and all machines which are converted for Woodland use (loggers, harvesters, etc.).

Machines with engines which are turbo-charged would not be in violation of such laws as the turbo-charger qualifies as a spark arrester.