

banks

with Installation Instructions
Owner's Manual

**Banks Ram-Air®
Intake System**

2014-2016 Chevrolet 5.3L & 6.2L Pickups
Excludes hybrid and flex-fuel vehicles.

THIS MANUAL IS FOR USE WITH KIT 41855, 41855-D, 41858 & 41858-D

banks

General Installation Practices

1. For ease of installation of your Banks Ram-air intake system, familiarize yourself with the procedure by reading the entire manual before starting work.

2. The exploded view of the Ram-Air assembly (pages 4-5) provides only general guidance. Refer to each step and section diagram in this manual for proper instruction.

3. Throughout this manual, the left side of the vehicle refers to the driver's side, and the right-side to the passenger's side.

4. Disconnect the ground cable from the battery before beginning work. If there are two batteries, disconnect both.

5. Route and tie wires and hoses a minimum of 6 inches away from exhaust heat, moving parts and sharp edges. Clearance of 8 inches or more is recommended where possible.

6. During installation, keep the work area clean. If foreign debris is transferred to any Banks system component, clean it thoroughly before installing.

7. When raising the vehicle, support it on properly weight-rated safety stands, ramps or a commercial hoist. Follow the manufacturer's safety precautions. Take care to balance the vehicle to prevent it from slipping or falling. When using ramps, be sure the front wheels are centered squarely on the topsides; put the transmission in park; set the parking brake; and place blocks behind the rear wheels.

⚠ CAUTION: Do not use floor jacks to support the vehicle while working under it. Do not raise the vehicle onto concrete blocks, masonry or any other item not intended specifically for this use.

NOTICE: The Banks Oiled Ram-Air Filter comes pre-oiled and no oiling is necessary for initial installation. Service the filter as specified in the Ram-Air Filter Cleaning Instructions Section of this manual.

⚠ WARNING! Vehicles that come with a Vehicle Emissions Control Information (VECI) label affixed to the Original Equipment Manufacturer's (OEM) air intake system airbox must replace the VECI label when installing a Banks Ram-Air® Intake System. A missing VECI label will prevent the vehicle from passing a smog inspection. A replacement VECI label can be obtained from the dealership. Replacement VECI labels must be in a location that is readily visible, on a painted surface in the engine bay, and shall not be affixed to any equipment that is easily detached from the vehicle.

Tools Required:

- 1/4" or 3/8" drive ratchets with metric sockets
- Standard and Phillips head screwdrivers
- Clean shop towels or rags
- 5/16" nut driver

Table of Contents

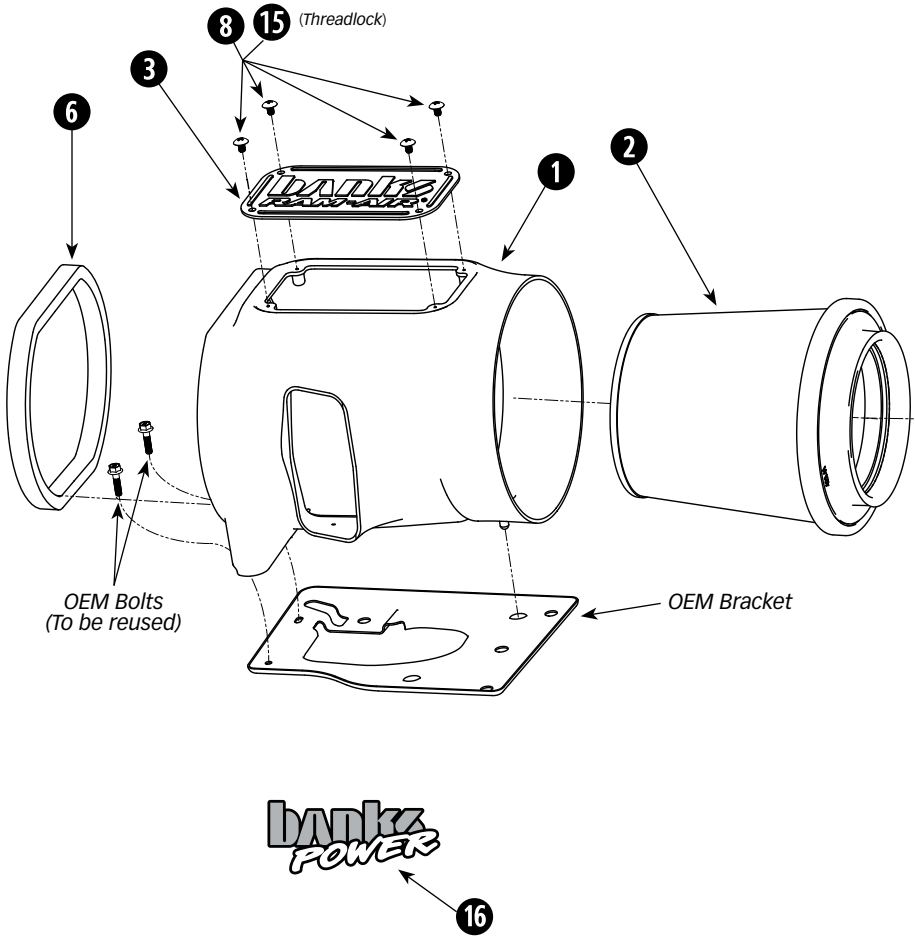
Section 1 **4**
General Assembly

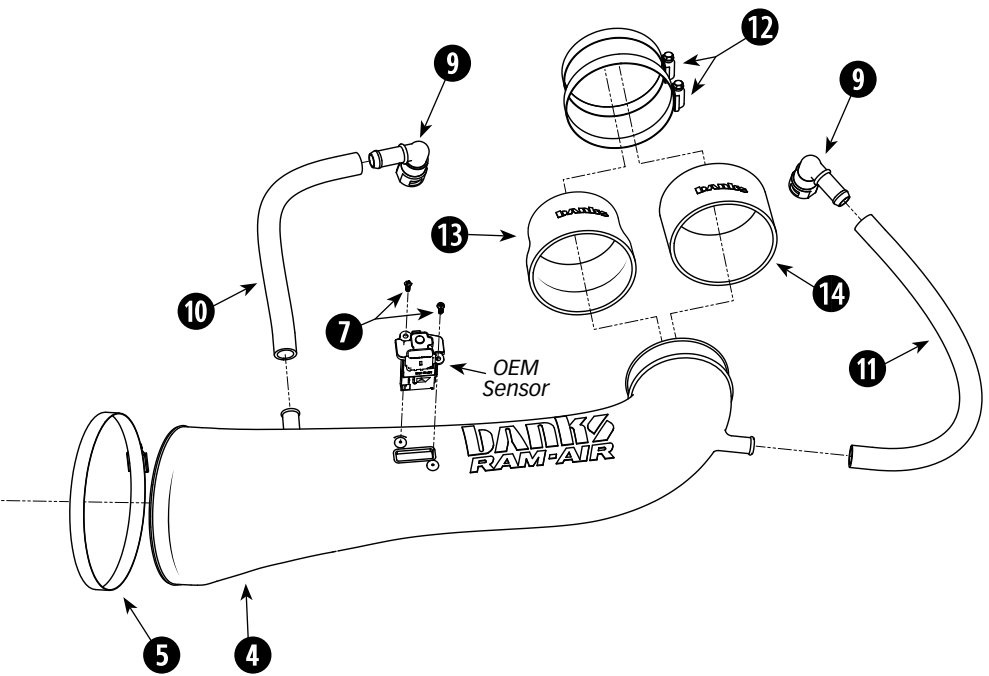
Section 2 **6**
Ram-Air Installation

Section 3
Filter Cleaning Instructions **12**

Section 1

General Assembly





Item	Description	Part#	Qty
1	Banks Ram-Air® Housing	41854	1
2	Banks Ram-Air® Air Filter Element; Oiled/Dry	42141/42121-D	1
3	Banks Ram-Air® Clear Window	41790	1
4	Banks Ram-Air® Intake Tube	41857	1
5	Hose Clamp, #104	92904	1
6	Foam Seal	93120	30"
7	Phillips Screw, 6-32 x 1/2"	91719	2
8	Phillips Screw, 1/4"-20x3/8"	91128	4
9	90° Degree PCV Connector	92040	2
10	5/8" PCV Hose	94141	12"
11	5/8" PCV Hose	94141	15"
12	#64 Hose Clamp	92864	2
13	Banks 3.8" to 3.5" Reducing Silicone Coupler (5.3L Only)	94278	1
14	Banks 3.8" Straight Silicone Coupler (6.2L Only)	94275	1
15	Threadlocker, Blue	90001	1
16	Urocal, Banks Power, Small	96009	2

Section 2

RAM-AIR INSTALLATION

You are about to install the **Banks Ram-Air® Intake System**. Read and follow all steps before working on the vehicle. Some components from the stock air intake system will remain in service. Take care when removing stock air intake components to not damage them.

Use the Bill of Materials Chart and the General Assembly Drawing to reference component nomenclature and location. Use caution when working in the engine compartment. Make sure the engine has been OFF for several hours and cool. Disconnect the battery ground cables from each battery (if so equipped). Secure the cables so that they do not come in contact with the battery posts during the installation.

1. Loosen the two hose clamps of the OEM tube assembly. See **Figure 1**

2. Disconnect the two OEM PCV connectors that attach to both sides of the engine. See **Figure 2**.

3. Remove the OEM tube assembly. See **Figure 3**.

4. Remove the OEM airbox by pulling up on the outlet side of the box to release the two peg retainers then sliding the airbox an inch to the driver side to free the last slotted retainer. See **Figure 4**.

NOTICE: If you are having difficulty removing the airbox, remove the chassis bracing bar first to make it easier.

5. Use the supplied T15 Torx bit to remove the two screws and the OEM sensor from the OEM housing. See **Figure 5**.

6. Install the OEM sensor onto the Banks Ram-Air® Tube using the two supplied small Philips heads screws. See **Figure 6**.

Figure 1



Figure 2



Figure 3

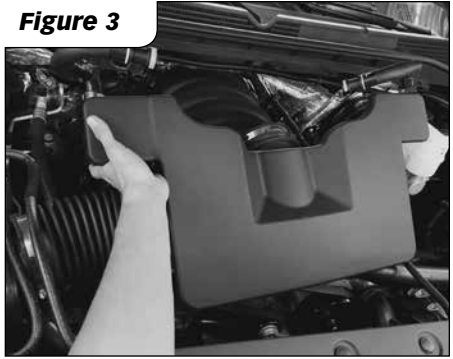


Figure 5

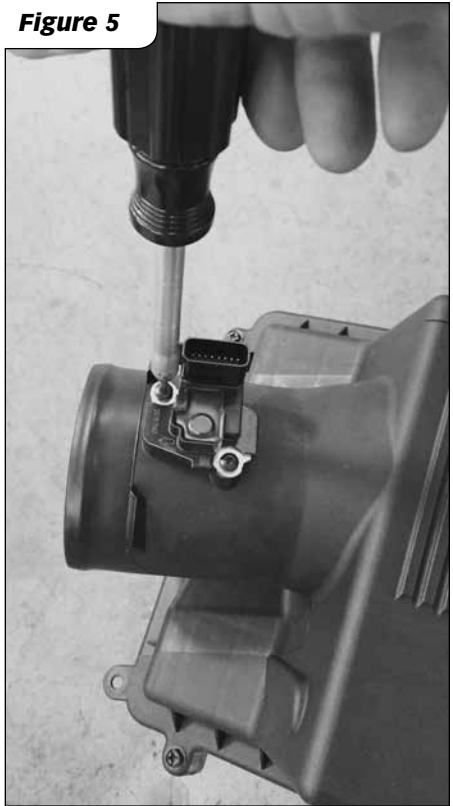


Figure 4



7. Install the foam seal strip on the inlet of the Banks Ram-Air® Housing as shown in **Figure 7**. If overlapping of the ends occurs, trim the excess length from the foam strip. Firmly press the adhesive onto the Banks Ram-Air® Housing.

8. Install the large hose clamp onto the base of the Banks Ram-Air® Filter. Insert the Banks Ram-Air® Filter into the Banks Ram-Air® Housing. See **Figure 8**.

9. Remove the two OEM bolts holding the airbox mounting bracket on the fender side of the engine bay. See **Figure 9**.

10. Remove the wire harness clip closest to the radiator to allow for clearance with the Banks Ram-Air® Housing. See **Figure 10**.

11. Insert the Banks Ram-Air® Housing into the vehicle. Align the front mounting peg of the Banks Ram-Air® Housing with the mounting grommet of the OEM bracket. See **Figure 11**.

12. Align then two rear holes of the Banks Ram-Air® Housing with the bracket and install the two OEM bolts to secure the Banks Ram-Air® Housing to the vehicle. See **Figure 12**.

13. For 5.3L Vehicles, install the Banks silicone REDUCING coupler shown in **Figure 13a**.

For 6.2L Vehicles, install the Banks silicone STRAIGHT coupler shown in **Figure 13b**.

Install the two hose clamps over the hose but do not tighten the clamps at this step.

Figure 6

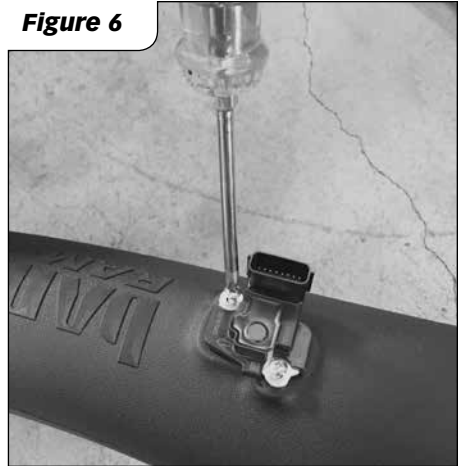


Figure 7

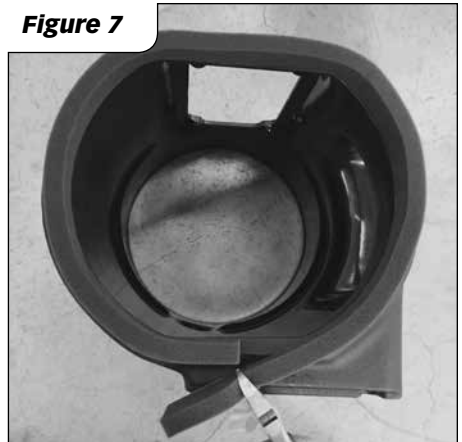


Figure 8

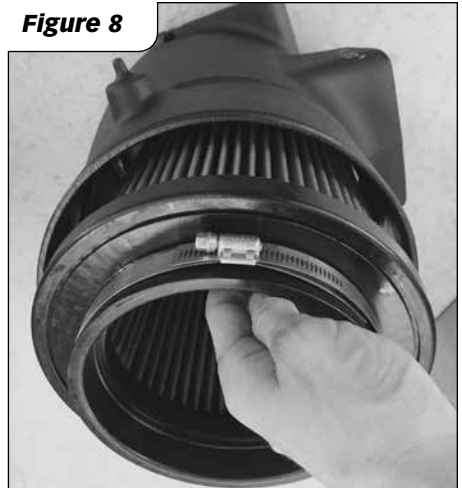


Figure 9

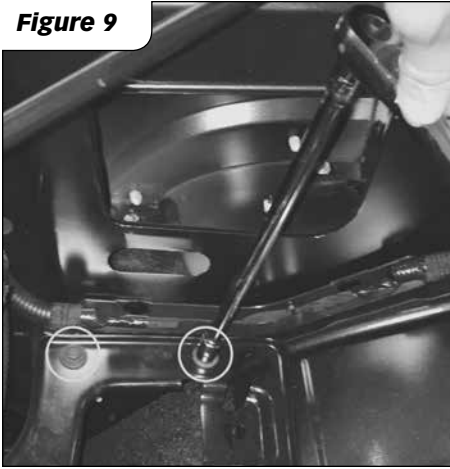


Figure 12

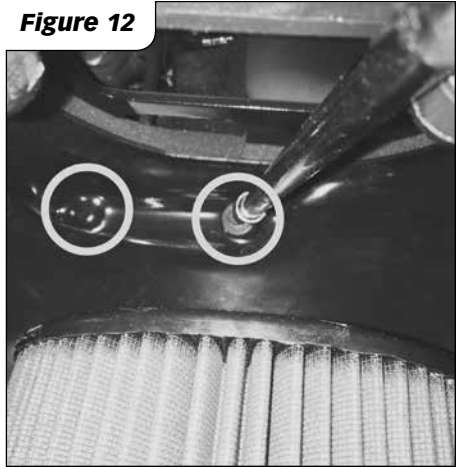


Figure 10

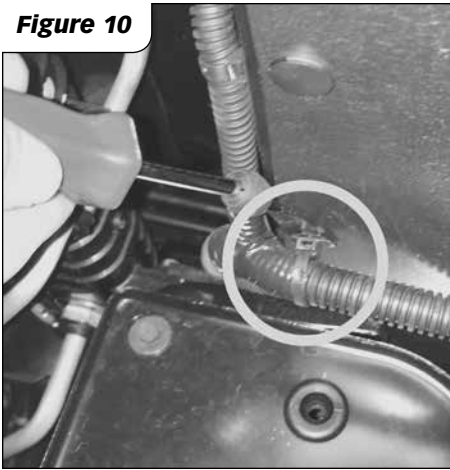


Figure 13a



Figure 11

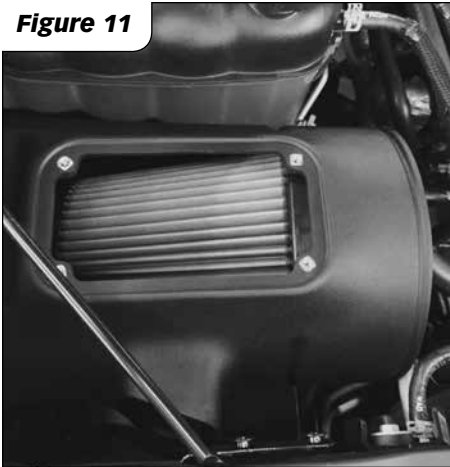
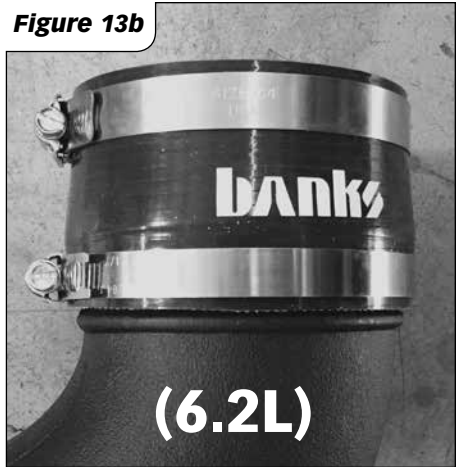


Figure 13b



14. Insert the Banks Ram-Air® Tube into the vehicle and insert the large end into the Filter. Apply pressure on the back of the filter through the hole in the housing against the Banks Ram-Air® Tube until the retaining bead engages the filter. Tighten the filter hose clamp. See **Figure 14**.

15. Install the Banks Hose Coupler onto the throttle body and tighten both clamps. See **Figure 15**.

16. Insert the two 90 degree PCV elbow pieces onto the two 5/8 ID PCV Hose. See **Figure 16**.

17. Install the shorter hose onto the passenger side hose barb of the Banks Ram-Air® Tube and the passenger side valve cover. Install the longer hose onto the driver side of the Banks Ram-Air® Tube and valve cover. See **Figure 17**.

18. Apply blue threadlocker to 4 supplied window screw and use to install clear window onto housing. Do not over tighten these screw. They just need to be snug. See **Figure 18**.

Note: Window screws may vibrate loose if threadlocker is not applied.

19. Install the factor MAF harness connector onto the MAF sensor. See **Figure 19**.

20. Re-connect battery grounds. You have successfully completed the installation of the Banks Ram-Air Intake system. Make sure to check all hose clamps for tightness and connectors for a sure fit. Make sure that the intake tube is not touching any engine components.

21. Your system contains a CARB EO label for emissions purposes. This label should be placed on the grill/radiator cross member inside the engine compartment, so that it is easily seen by an emissions technician.

Figure 14

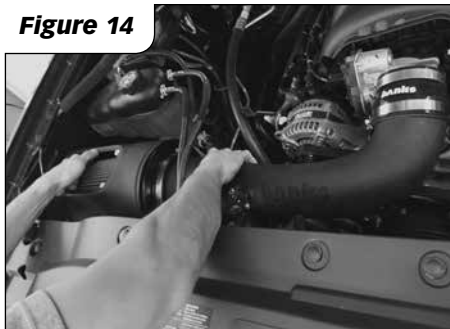


Figure 15

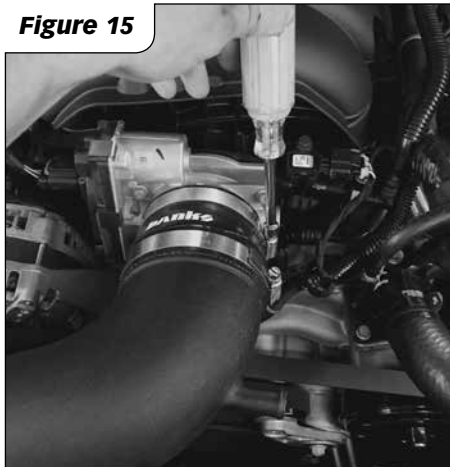


Figure 16



Figure 17

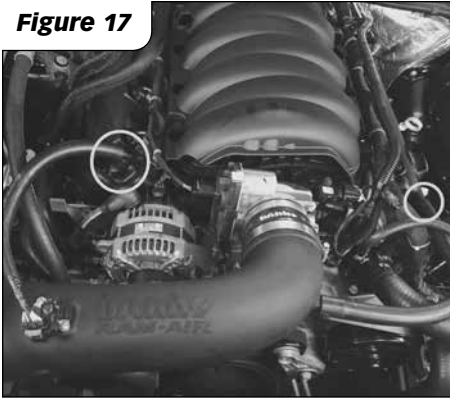


Figure 18



Figure 19



Section 3

AIR FILTER CLEANING INSTRUCTIONS

OILED AIR FILTER ONLY

NOTICE: The Banks Ram-Air Oiled Air Filter comes pre-oiled and no oiling is necessary for initial installation. Use Banks Ram-Air Filter Cleaning System (part#90094), available from Gale Banks Engineering to service the Air Filter. Follow the instructions included with the cleaning system to clean and re-oil your Bank Ram-Air Oiled Air Filter.

1. PRE-CLEANING

Tap the element to dislodge any large embedded dirt, then gently brush with a soft bristle brush. *NOTE: If complete cleaning is not practical at this time, reoil the element and reinstall in your vehicle.*

2. SPRAY-ON CLEANING

Spray air-filter cleaner liberally onto the entire element and let soak for 10 minutes.

3. PAN CLEANING

Large air-filter elements can be rolled or soaked in a shallow pan of air-filter cleaner. Remove immediately and let soak for approximately 10 minutes.

NOTICE: NEVER use gasoline, steam, caustic solutions, strong detergents, high-pressure nozzles, or cleaning solvents to clean the filter element. All of these can cause harm to the filter media as well as SHRINK and HARDEN the rubber end caps.

4. RINSING

Rinse off the element with low-pressure water. Tap water is okay. Always flush from the clean side to dirty side. This removes the dirt

and does not drive it into the filter.

5. DRYING

Always dry naturally. After rinsing, shake off all excess water and let the element dry naturally.

6. AEROSOL OILING

After cleaning air filter always reoil before using. Spray air filter oil down into each pleat with one pass per pleat. Wait 10 minutes and re-oil any white spots still showing.

7. OILING HINTS

Never use a Banks Ram-Air filter without oil (the filter will not stop the dirt without the oil). Use only air filter oil. Air-filter oil is a compound of mineral and animal oil blended with special polymers to form a very efficient tack barrier. Red dye is added to show just where you have applied the oil. Eventually the red color will fade but the oil will remain and filter the air. NEVER USE Automatic Transmission Fluid. NEVER USE Motor Oil. NEVER USE Diesel Fuel. NEVER USE WD40, LPS, or other light-weight oils.

8. REINSTALL

Reinstall your Banks Ram-Air filter element with proper care. Make sure the element seats properly in the filter case. Install the cover making sure it's in the right position. Tighten all the nuts, bolts, screws or clips to factory specifications.

9. DO NOT DISCARD

Affix the "Do Not Discard" sticker to the filter case (included with every Banks replacement element). Make sure you put the sticker in a highly visible place to alert your mechanic not to discard.

10. PERFORMANCE HINTS

Service every 50-100,000 miles on

street-driven applications. Service more often in offroad or heavy-dust conditions. If an air-filter restriction gauge is installed, then change the element when the air-filter restriction reaches 18"—H.O.

⚠ CAUTION: **Extremely fine dust from agriculture or offroad use will pull the oil from the element. Frequent reoiling of the element's clean side might be required. Completely service when practicable. For extra protection use an air-filter sealing grease on rubber ends of the element. Service only with air-filter cleaner and air-filter oil.**

DRY FILTER CLEANING

Clean every 50-100,000 miles on street-driven applications. Clean more often in offroad or heavy-dust conditions. If an air-filter restriction gauge is installed, then change the element when the air-filter restriction reaches 18"—H.O.

1. PRE-CLEANING

Carefully tap the air filter element to dislodge any large embedded dirt or debris.

2. CLEANING

Spray an appropriate DRY AIR-FILTER CLEANER SOLUTION liberally onto both sides of the entire filter element with the majority applied to the dirty side. Soak for 10 minutes. Do not allow the DRY AIR-FILTER CLEANER SOLUTION to dry on the air filter.

NOTICE: **NEVER use gasoline, steam, caustic solutions, strong detergents, high-pressure nozzles, or cleaning solvents to clean the filter**

element. All of these can cause harm to the filter media as well as SHRINK and HARDEN the rubber end caps.

3. RINSING

Rinse the filter element with cool or warm (not hot) water from the clean side out in order to flush the dirt out of the filter. It may be necessary to use your fingers on the hose to apply light water pressure. Repeat steps 2 and 3, until the water flowing through the media is completely clear of any dirt and debris.

5. DRYING

After rinsing, gently shake off excessive water and allow to dry naturally. Re-install the filter onto the intake system, airbox or custom assembly once it is dry or just slightly damp. Follow all original installation instructions.

6. REINSTALL

Reinstall your Banks Ram-Air filter element with proper care. Make sure the element seats properly in the filter case. Install the cover making sure it's in the right position. Tighten all the nuts, bolts, screws or clips to factory specifications.

7. DO NOT DISCARD

Affix the "Do Not Discard" sticker to the filter case (included with every Banks replacement element). Make sure you put the sticker in a highly visible place to alert your mechanic not to discard.

8. PERFORMANCE HINTS

Service every 50-100,000 miles on street-driven applications. Service more often in offroad or heavy-dust conditions. If an air-filter restriction gauge is installed, then change the element when the air-filter restriction reaches 18"—H.O.