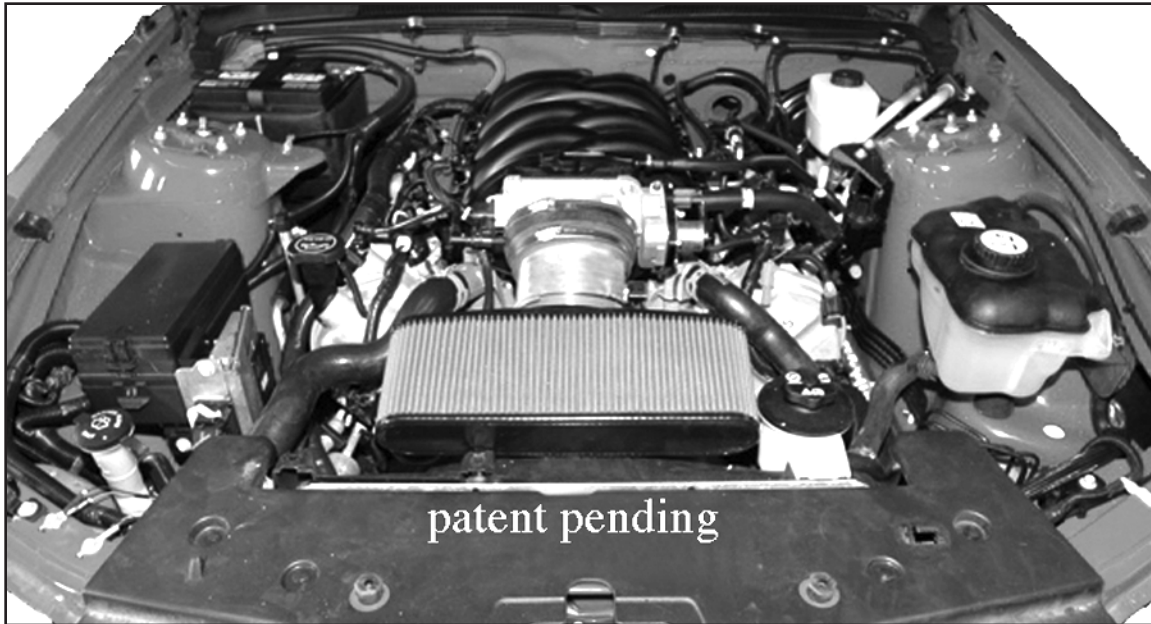


WMS High Velocity Intake - 2005 Mustang Installation Instructions

Installation should be performed by a licensed mechanic familiar with fuel injected engines

Be sure engine is cold before performing any work.

Disconnect negative battery terminal before performing any work.



The finished install showing front mounted filter and mass air meter as well as the relocated coolant overflow tan.

1. Remove stock intake hose and airbox as one unit.
 - unclip PCV inlet hose at throttle body
 - unplug wiring harness to the mass air electronics at the airbox
 - loosen hoseclamp where plastic air inlet attaches to the throttle body.
 - unbolt airbox mounting grommet on the drivers inner fenderThe intake hose and airbox will now come out of the car as one.
2. Be sure engine is cold and cooling system is not pressurized.
 - drain coolant as described in the factory manual.
 - using a hose to drain into a pan will confirm the correct amount is being re-filled
3. Remove coolant tank from stock location.
 - loosen clamp where large tank hose attaches at the thermostat housing and disconnect hose.
 - remove small overflow hose at top of the overflow bottle
 - unbolt overflow bottle from mounting location on fan shroudThe overflow bottle and large hose can now be removed as one.

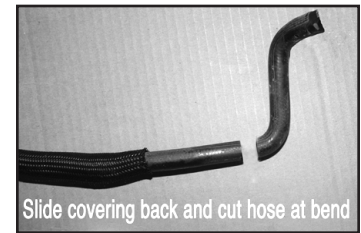
4. Install the coolant tank in its new location on drivers side.

- remove the stock overflow bottle clip-nuts from the fan shroud.
- use a small screwdriver to push the retaining clip up and slide the clip-nut out.
- transfer these clip-nuts to the WMS aluminum mounting bracket, they slide into the cut slots
- mount the overflow bottle to the aluminum bracket using the stock bolts
- push the WMS urethane bushing into the existing hole on lower inner fender
- set the overflow bottle into the bushing and bolt aluminum bracket to car with stock bolt.



5. Extend small overflow hose.

- loosen clamp where hose is attached to radiator and remove hose
- cut hose in two as shown
- use WMS supplied nipple, hose and clamps to extend
- install to radiator neck with stock clamp, route along front and side of fender, secure with tie wraps
- cut hose to length and attach to overflow bottle.



6. Install the large WMS hose from thermostat to overflow bottle.

- the small end of the hose attaches to the thermostat housing using stock clamp
- the large end of the hose attaches to the overflow bottle using the stock clamp
- be sure hose routes without any kinks or without hitting any sharp objects

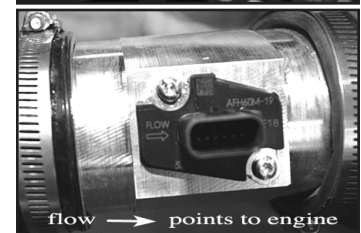
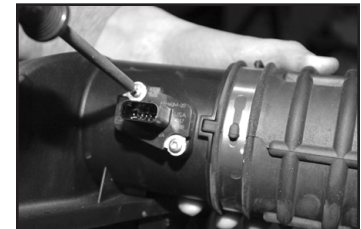
7. Refill cooling system as described in the factory manual.

- coolant must be filled through the engine cap as well, this is screwed into the front drivers side where the upper rad hose meets the engine.

8. If installing the optional Ram Air box this will be done now. Go to the Ram Air box installation section on last page

9. Move stock maf sensor electronics to WMS billet meter housing.

- remove two retaining screws using supplied Tork T-20 bit
- carefully remove sensor from stock housing and slide into WMS billet meter housing
- be sure the sensor is oriented correctly - the WMS logo on the meter housing should face up and towards you, the sensor will slide into the right side of the meter housing. The flow arrow on the sensor will point towards the engine.



10. Install intake into the car

- Clamp filter to front of WMS meter housing using supplied clamp.
- Clamp coupler to back of WMS meter housing using supplied clamp.
- Position clamp screws on underside for a cleaner appearance.
- The billet adapter for PCV breather hose will point to passengers side of the car.
- Clamp intake assembly to throttle body using supplied clamp.
- The air filter should point down slightly to clear the hood when installed correctly.

11. Extend mass air wires - be sure battery is disconnected
 - strip back wire loom at stock maf plug
 - cut the mass air wire harness (6 wires) about 3" back from the plug.
 - strip 3/8" of insulation off all wires
 - extend harness as shown in the attached diagram
 - the supplied connectors need to be properly crimped to the wires, then can be heat shrunk to seal the connection. Test all your crimps before heat shrinking to be sure they are secure.
 - use supplied wire loom to cover wires, cut to length first and burn ends to seal.
 - once harness is extended, plug into maf sensor, and tie wrap the harness out of the way.

12. Start car and warm up to operating temperature
 - check for leaks in cooling system
 - check for airleaks in intake system at couplers

If limp mode light comes on.

- double check the maf sensor flow arrow points into the engine
- double check extension of mass air harness.

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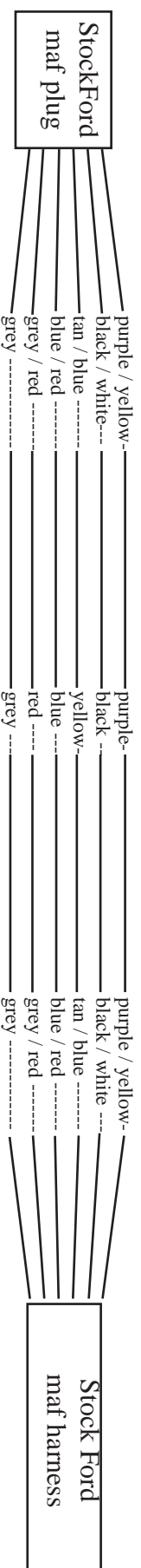
223114 Range Rd 285, Calgary, Alberta, Canada T2P 2G6

Phone: (403) 243-6205 Fax: (403) 243-8102 www.wmsracing.com



Wiring diagram for mass air harness extension

WMS supplied wires



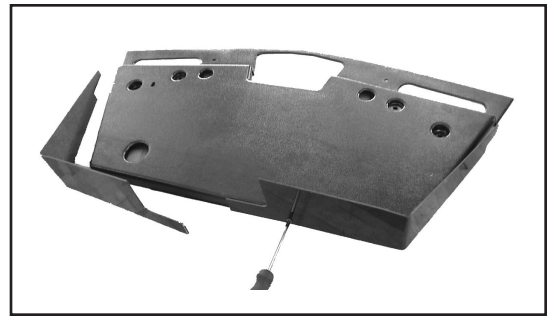
Notes for extending the mass air harness.

- cut the mass air wire harness (6 wires) about 3" back from the plug.
- strip insulation off all wires so 3/8" of bare wires is showing.
 - use a proper crimping tool to crimp the connectors
- the supplied connectors need to be properly crimped to the wires, then can be heat shrunk to seal the connection. Test all your crimps before heat shrinking to be sure they are tight.
- use supplied wire loom to cover wires, cut to length first and burn ends to seal.

Ram Air Box Installation

1. Assemble Ram Air Box

- lay bottom of box on flat surface to attach sides.
- remove covering from double sided tape, align carefully and stick sides to bottom.
- use supplied self tapping screws to attach sides to bottom, there are 5 holes per side for screws.



2. Install hood prop rod holder clip

- install in oval hole on right side of the box, be sure opening for the rod is facing forward.
- the large end of the clip goes in first, then use small screwdriver to pry the small end through, securing the clip in place.

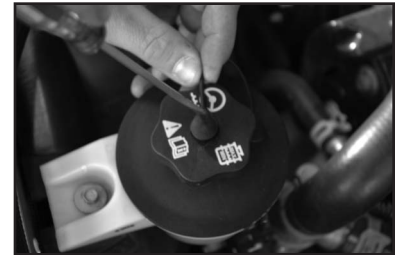


3. Remove the stock radiator cover

- unscrew 2 inside rubber hood bumpers
- use a small screwdriver to pry up the stock plastic retaining clips, remove the inside of the clip first.
- there are 6 in total, keep these for install

4. Remove power steering cap and retaining strap

- as shown, carefully pry on retaining strap to unhook from cap and reservoir.
- the strap will not be used again, the cap will install after the ram air box is in place.



5. Install Ram Air Box

- the WMS Ram Air Box fits in the stock position of the radiator cover
- be sure cover slides under the lip of the stock grill
- use the 6 stock retaining clips to hold the WMS Ram Air Box in place
- the 2 outside clips go into the radiator supports, these supports may need to be moved slightly to align the holes. Loosen the 2 bolts on each to align.
- install power steering cap and rubber hood bumpers

