



# MGA Supercharger System

## Installation Instructions

### For 1955 to 1962 MGA

PART # 150-040

440 Rutherford St. P.O. Box 847 Goleta, CA 93117  
1-800-667-7872 • FAX 805-692-2525 • [www.mossmotors.com](http://www.mossmotors.com)



**Please read and understand these instructions completely before you begin the installation.**

#### **A few notes before you begin:**

**Hose clamps:** Re-use hose clamps, or purchase new ones where necessary. Use new hose clamps on all fuel connections.

**If you have installed vacuum boosted brakes** - you **MUST** install a check valve (Moss Part # 150-071) in the vacuum line. This will prevent pressurized air from reaching the brake booster system and damaging it. To install, remove the larger of the 3 plugs in the back of the supercharger manifold and install a barbed fitting using teflon tape on the threads. Using 3/8 in vacuum line, install the check

valve between the barbed fitting and the brake booster (closer to the booster) with the check valve arrow pointing toward the supercharger manifold.

**Engine condition** - Your car should have a fresh tune up, including new spark plug wires, points, and a new distributor cap and rotor. Spark plugs are included in the supercharger system.

#### **How superchargers work —**

Superchargers compress the air/fuel mixture, filling cylinders with a greater charge than when normally aspirated. Normally aspirated engines produce vacuum, read in inches of mercury, superchargers and turbochargers produce boost, read in positive pounds per square inch.

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Boost capacity is determined by supercharger RPM which is, of course, affected by pulley size (the smaller the supercharger pulley, the faster the supercharger turns at the same engine speed). Actual boost is determined by atmospheric pressure (a combination of altitude, temperature, humidity) and internal engine back pressure which is governed by engine design, intake/exhaust valve overlap and engine compression.

Assuming that the car has a stock camshaft and the engine is good shape, you may expect 6 to 7 lbs. of boost with the Moss supercharger system utilizing the pulley supplied.

Due to the phenomenon of “effective boost”, raising your compression one point is equivalent to adding two psi of boost. Therefore a higher compression engine with a little less boost will make similar power to a low compression engine with a little more boost, all else being equal.

**Higher boost in a higher compression engine will often lead to detonation and engine damage. The most common mistake in supercharging is trying to run too much boost.**

Our car made the most power with 7 lbs of boost with the stock cylinder head and the, 2.75” pulley. We achieved the most boost at sea level, on a 50° morning. If you have a modified cylinder head, you may have good results with the high boost, 2.6” pulley, #052-221. Our dyno sheets were produced with the recommended distributor, the exact same carburetor tuning as supplied in the Moss system, and 15 degrees of initial timing, on a 1960 MGA with a stock engine and 8.9:1 compression, at sea level on a Mustang Chassis Dynamometer — your results will definitely vary.

**You must run premium fuel in your supercharged MGA.**

Carburetor — The supplied SU HS6 carburetor has been pre tuned and jetted for a supercharged MGA with a stock engine. The metering

rod, jet, and slide have been altered to run properly and safely on a wide range of supercharged, unmodified engines. We will not be responsible for modified engines — we recommend dyno tuning modified engines, while reading the air fuel ratio, so as not to run into lean conditions. The carburetor has a BCG needle, a red spring, and 50 WT oil.

## **Available Moss Motors accessories:**

- If your car has vacuum boosted brakes, you **MUST** use a check valve, #150-071.
- Distributor we tested with, and highly recommend is #143-110 - it has the proper advance curve and was used for all Moss Motors dyno testing and tuning. If you are not going to change your distributor, set the advance to 15° before disassembling anything. Again, for optimum performance, we recommend changing to the #143-110 vacuum advance distributor.
- Please use NGK BPR7ES replacement spark plugs, #052-504, gap 0.035”. Be aware that the cross-referenced plugs may NOT be the same heat range, “hotter” plugs could lead to detonation and engine damage.
- K&N air filter cleaning kit, #001-130.
- High boost pulley, #052-221. When you change the pulley to anything other than the supplied 2.75” pulley, it voids your supercharger warranty.

**Changing the supercharger pulley:** The nose of the supercharger is delicate and should be treated as such. You may have luck removing the pulley without removing the supercharger. If not, you need to remove the supercharger and use the appropriate pulley puller. When installing a pulley, put anti-seize on the pulley shaft. Slip the pulley over the key and threads, wiggle if necessary — do not use a hammer. Use an 18mm socket, and torque the pulley to 40 ft-lb. Use a crescent or 1-1/2” wrench on the back of the pulley to counteract the torque.

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## Tools required:

**Sockets:** US — 5/16", 7/16", 1/2", 9/16", 7/8" (or 22MM), 1-5/16. 13/16 spark plug. Also a 1/2 swivel socket will make installation easier. Metric — 10, 22 (or 7/8").

**Drives:** 1/4, and 3/8 ratchet. 1/2 drive torque wrench and breaker bar. A 1/2 impact wrench and 3/8 air ratchet will make installation easier.

**Wrenches:** 1/2", 7/16", 9/16", 7/8", 7 and 13mm combination. 1/2" ratcheting box wrench. Small adjustable wrench.

**Allen wrenches:** 6MM, 7/32" and 5/32"

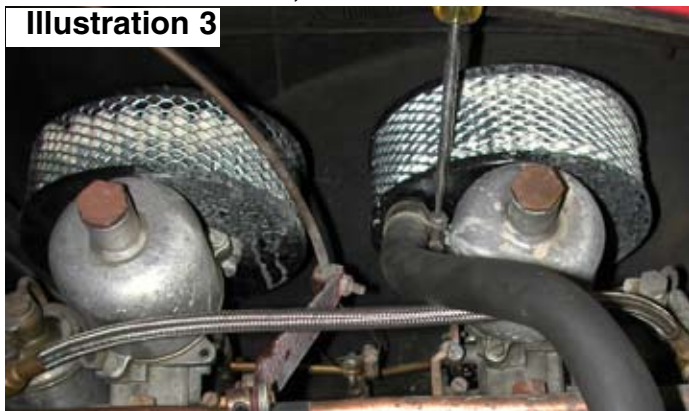
**Other tools:** A feeler gage or spark plug gap gage, cold (flat) chisel, large and small flat blade screw drivers, a floor jack, a gasket scraper, a rubber mallet, a dial caliper, brake clean and rags, coolant and a catch pan, a bottle of anti-seize, a timing light — we recommend a timing light with an adjuster wheel so that you can set your timing more accurately.

1. Disconnect the battery ground cable, block your wheels, and open the hood.

2. Drain coolant; please dispose of properly if you are not re-using it. On some cars the radiator has a pet -cock to drain coolant and on others the lower radiator hose must be disconnected from the radiator. Once the radiator is drained, and you haven't already, disconnect the lower radiator hose from the radiator.

3. Disconnect the valve cover vent hose from the back of the forward air cleaner and using a 1/2" combination wrench, remove the air cleaners.

**Illustration 3**



150-040

**Illustration 3 cont.**



4. Once the air cleaners are removed, you can disconnect the choke and throttle cables. Also disconnect the throttle return springs. Remove the throttle cable bracket.

**Illustration 4**

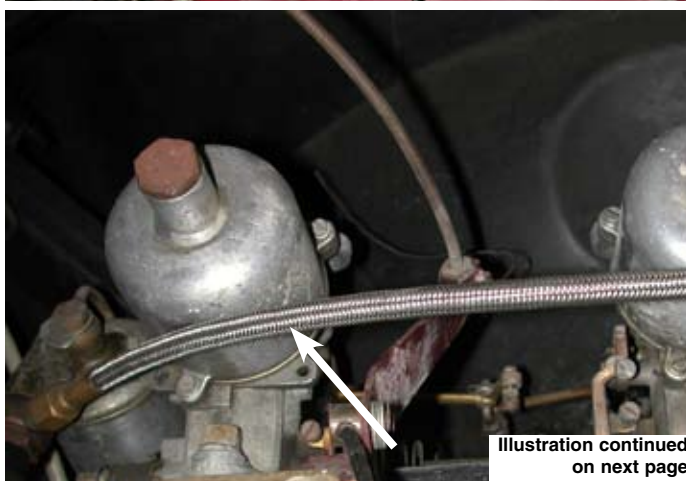
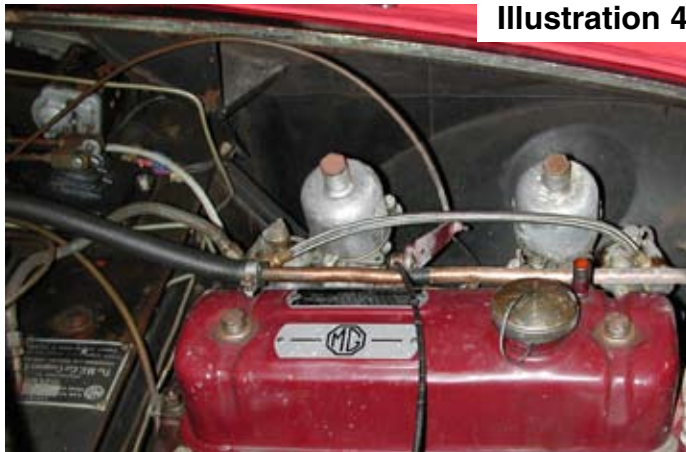


Illustration continued  
on next page



# Installation Instructions



Illustration 4 cont.



5. Disconnect the fuel line at the threaded junction, at the back of the engine, in front of the heater box. Disconnect and remove the metal heater tube that runs past the carburetors.



Illustration 5 cont.



6. Disconnect vacuum advance line from the bottom of the rear carburetor. If you decide not to go with our recommended distributor, pay close attention to the vacuum arrangement of your distributor — it will either be manifold or ported vacuum. Manifold vacuum is taken from the intake manifold. Ported vacuum is taken from the bottom of the carburetor. Remove the vacuum advance line from the car completely.



Illustration 5



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7. Using a 9/16" wrench, remove the nuts securing the carburetors. Then remove the carburetors.



Illustration 7

8. Using a 1/2" socket, remove the nuts securing the intake manifold. Then remove the intake manifold. A new intake/exhaust manifold gasket is included in your supercharger system. It will be replaced later. You will reuse the manifold fastener washers, Moss #460-090. Also, this is a good time to replace your studs if they are corroded or worn.



Illustration 8

9. Remove upper radiator hose. Now, using a 1/2IN socket and wrench, remove the 6 bolts that secure the radiator, and remove the radiator from the car.

10. Completely remove the lower radiator hose assembly.

11. At this time, using a 7/16" socket, just loosen the four bolts, which hold the fan to the water pump.



Illustration 11

12. Using an 11/16" socket, (this could be different for your car, use the appropriate socket) loosen the nut in the center of the generator pulley. You will need to stop the fan from turning, a carefully positioned rag can help. We recommend using an impact wrench for loosening this nut.

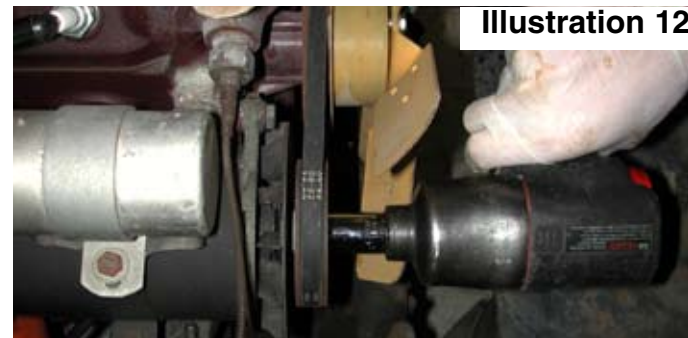


Illustration 12

13. Loosen the generator bolts, and remove the belt.



Illustration 13

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14. Remove the four 7/16" headed bolts holding on the fan and water pump pulley, and remove them. If the water pump is old replace it with a new one, Moss part #460-950.

**Illustration 14**



15. You must remove the crankshaft pulley to install the new serpentine pulley. To do so, you need to raise the engine slightly. At this point, you will be going after the engine mounts. First, set a jack, with a wood block on it (or something similar to protect the oil pan), underneath your car. Apply very slight pressure to the oil pan. Remove each of the 4 bolts that hold the engine mount to the chassis. A 1/2" ratcheting box end wrench is a very handy tool when disconnecting the engine mounts from the chassis.



**Illustration 15**



16. Once all 8 fasteners are clear, jack up the engine enough to get to the crank pulley. A few inches should be enough, two inches was sufficient in our test car.

17. Remove the crank pulley. There is a tab-locking washer holding the crank pulley bolt in place. Using a chisel bend the tab away from the bolt. Put the car in gear and set the e-brake. Using a breaker bar and a 1-5/16" socket remove the crank pulley bolt. You may need a friend to hold the brakes on. You may also need an impact wrench to remove the bolt if it is stubborn. With the bolt removed, remove the pulley. You may have to rock it back and forth to slide it off of the crank.

**Illustration 17**



18. Now install your new serpentine pulley. A little anti-seize on the end of the crank may ease installation. You may also need a rubber mallet to install it. We've supplied a new tab washer that will need to be bent toward the crank pulley and fit into the slot on the pulley. Tighten and torque the bolt to 70 lb-ft (9.6 kg. m.). You may want to also use anti-seize on the crank pulley bolt. Again you may need someone to hold the brakes while you torque the bolt. Bend the tab-locking washer over the bolt head, with a screw driver. Protect the pulley from the screw driver with a rag.



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**Illustration 18**



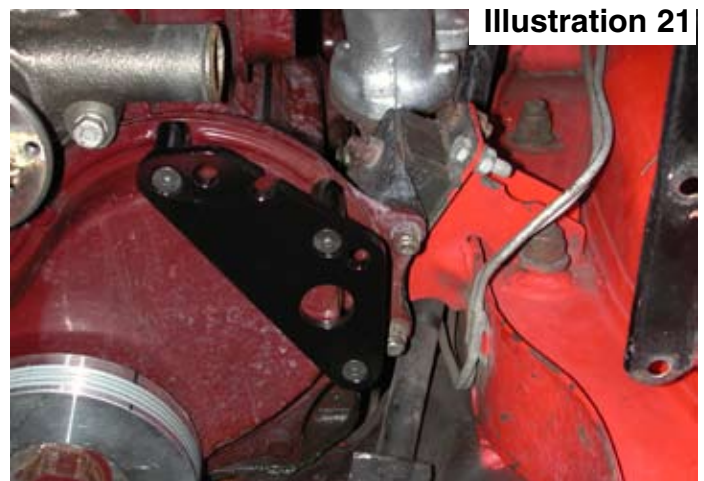
**19.** Using the original bolts and nuts, install the new engine mounts (Moss #413-010 R, #413-020 L). Lower the engine. You may want to keep the jack under the engine just in case you have to use it to aid in alignment.

**20.** Now to the timing cover. You will remove three timing cover bolts to install the idler pulley plate. Use a 7/16" socket.

**Illustration 20**



**21.** Install the idler plate, with the three spacers behind it, using the included 1/4-28 flat head screws, and tighten using a 5/32 allen wrench. Loctite (thread-lock) the screws.



**Illustration 21**

**22.** Now install one idler pulley. Mount inner most idler pulley first, this is the one that is closest to the water pump and uses the shorter of the two 3/8 bolts. Slip the flat washer over the bolt, then the idler, then the spacer (small end toward the idler). Install this assembly on the idler plate, in the hole closest to the water pump, then start the lock nut. Tighten to 25 ft-lbs. You can not install the outer idler until the supercharger is in place.



**Illustration 22**



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**23.** Remove the old generator pulley. Now is a good time to refinish your generator fan if you wish. Apply a light layer of anti-seize to the bore of the new pulley. Install the new generator pulley and start the nut. Tighten the nut to 45 ft-lb. We have had good luck holding the fan with a rag and using an impact to tighten the pulley.

**24.** Now install the slide and tensioner assembly. Remove the nut and bolt securing the generator slide to the generator. Place the square headed adjuster bolt through the hole in the tensioner slide, and thread it into your generator. Make sure the slot is over the adjuster stud mounted to the engine. Thread the supplied 5/16"-18 lock nut onto the square headed adjuster on the back side of the generator ear. (The generator may have to be pivoted up to install the nut.) The square headed adjuster should not be tightened all the way — the slide needs to be able to move a little. Now find the 2.5" long 5/16-24 bolt, and thread the jam nut all the way on. Thread this assembly through the square headed adjuster. The bolt will thread toward the stud. This bolt is used to adjust the generator to create proper belt tension.



**Illustration 24**



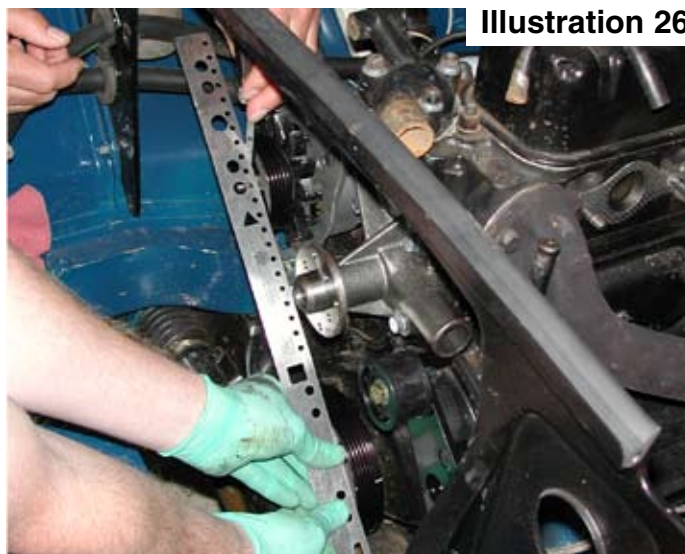
**25.** Now slip the adjuster receiver block over the big, custom adjuster nut, and install on the stud on the engine. Run the nut over the slide stud but do not tighten — you will need to actuate the slide when you put the belt on. Snug the generator pivot bolts.



**Illustration 25**



**26.** Using a straight edge, check the alignment of the generator pulley - if necessary, you can use two (of the 4) supplied 5/16 washers as shims on the pivot brackets. With the straight edge on the crank pulley there should be about 1/16" gap between the straight edge and the generator pulley.



**Illustration 26**



# Installation Instructions

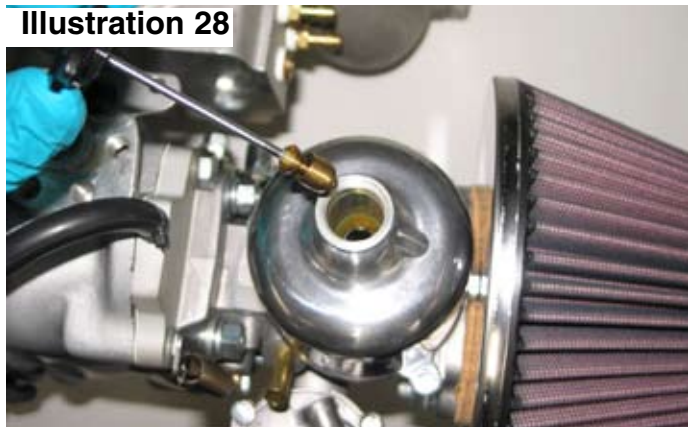
**27.** Now is the time to install the supercharger assembly. Your supercharger, manifold and carburetor come pre-assembled from Moss Motors.

**Illustration 27**



**28.** The new carburetor is shipped dry. You will need to fill the dashpot with the included 50wt oil. To fill the dashpot with 50wt oil, unscrew the black dashpot cap, and pull it up to remove the damper. Set it aside. Now fill the center shaft (piston shaft) to about 1/2" from the top, with the supplied oil (you may want to use side-cutters to increase the opening in the bottle's nozzle). Reinstall the damper and screw on the dashpot cap. Although oil weight can be changed for tuning, we highly recommend using the recommended 50wt oil unless you are very familiar with SU carburetors, and have a dynamometer and wide-band O2 sensor available for tuning.

**Illustration 28**



**29.** At this point replace your intake/exhaust gasket. Remove your exhaust manifold, clean the surface, and install the supplied intake gasket (with the metallic side facing away from engine). As previously stated, this is a good time to replace the studs. You will use your old, large manifold fastener washers. Using dial calipers, measure the exhaust manifold flange thickness and write it down for future use. Reinstall the exhaust manifold.

**30.** Install the supercharger assembly. Measure the flange thickness of the supercharger manifold. Compare this measurement to the exhaust flange measurement. If the measurements are the same, install the supercharger assembly. If not, you will need to shim the washers. Use the supplied shims to achieve the proper thickness. Use the supplied adhesive to hold multiple shims together and also hold the shims to the washers to aid in assembly. Once your shims are in-place, install the supercharger assembly. Slip on the big washers, lock washers, and start the nuts. Tighten the manifold fasteners from the center ones to the outer ones; torque them to 20 ft-lb (we had good luck using a swivel socket).

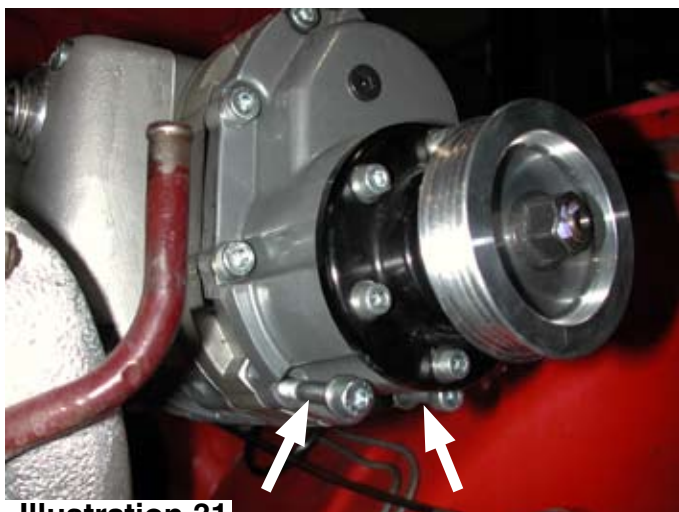


**Illustration 30**

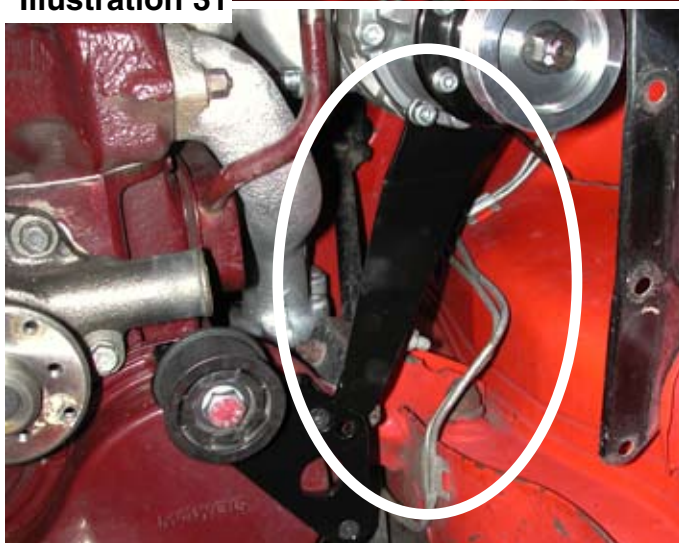


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**31.** Install the front supercharger support bracket. Using a 6mm allen wrench, remove two blower housing bolts — the two bottom most bolts on the gear housing. They are tight, you may want to use an allen socket. Install the support bracket to the supercharger, apply loctite to the bolts, and finger tighten (make sure the bolt heads are all the way down, against the bracket). This brace connects the blower to the back of the idler plate, assure that the bracket faces the right way.



**Illustration 31**



**32.** Now install the outer (lower) idler pulley, this one uses the longer of the two 3/8" bolts. Again, slip the flat washer over the bolt, then the idler, then the spacer (small end toward the idler). Install this assembly on the idler plate in the available hole, make sure the bolt goes through the supercharger support bracket, then put on the M10 "D" washer (the "D" washer sits against

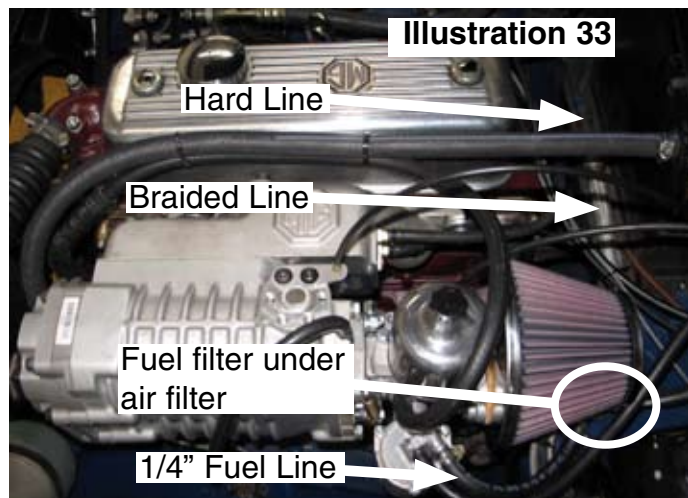
the back of the support bracket) and start the lock nut. Tighten the idler bolt to 25 ft-lbs. Then tighten the blower housing bolts, and torque them to 20 ft-lb.



**Illustration 32**



**33.** Install the fuel line. Included in the supercharger system are new flexible fuel lines, and a new fuel filter. Connect the new braided line to your existing hard line. Then connect it to the "IN" side of the fuel filter. Connect 1/4" fuel line from the "OUT" side of the filter to the carburetor. Make sure that there are no kinks in the hoses, and tighten all connections. The float lid is installed on the float bowl with the fuel and vent tubes pointing toward the front of the car. The lid can be installed with the tubes pointing left and slightly rearward (pictured) if desired.



**Illustration 33**



# Installation Instructions

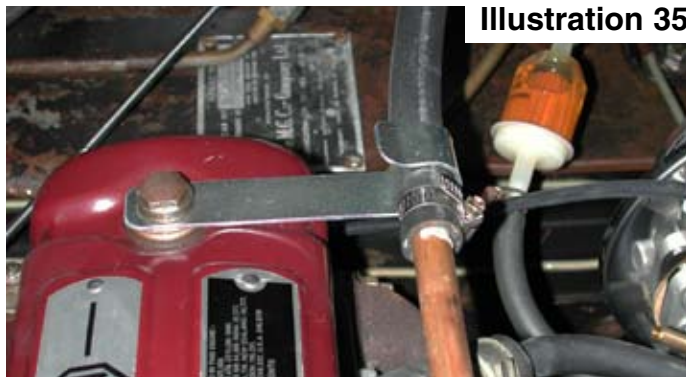
**34.** On to the lower radiator hose assembly. You will only use a portion of the provided molded lower hose. See the pictures for a better understanding of the assembly. The new hose will be cut 2 1/4" from the end furthest from the small diameter off-shoot. Cut again 5 1/4" further up the hose. Cut it a little long, it can always be trimmed shorter. The center section will be used and the other two pieces discarded. Use silicone lubricant or WD-40 to ease the installation of the hose onto the elbow. Make sure to note the proper alignment of the molded hose. Now install the 5" of straight radiator hose on the other end of the elbow. Then install the 7" of 1/2" heater hose. Make sure to clamp all connections.



**Illustration 34**



**35.** Now install your lower radiator hose assembly to the water pump. Please look at the images to make sure that your hose is the right shape and will not interfere with anything. Install the heater line from the elbow to the metal tubing which passes the valve cover, and clamp. Connect the heater core to the tube passing the valve cover using 12" of 1/2" heater hose. Double check all clamps. Install the heater hose retaining hook over the rear valve cover bolt and hook the hose into it. Slip the lower radiator hose clamp over the hose and wedge it there for later.



**Illustration 35**



**36.** Install the new water pump pulley and your old fan with the bolts and lock washers previously removed. Use a 7/16" socket and tighten to 9 ft-lb. Snug in a cross pattern. Spin the fan to make sure everything is OK.

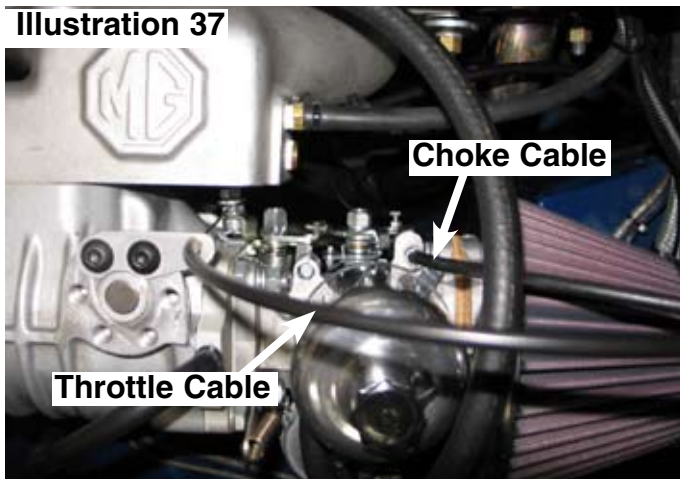


**Illustration 36**

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**37.** The next step is a bit difficult. Both the choke and throttle cables are in a tight spot on the carburetor. Take your time. If your choke cable is good, you can use it. If it is beat up, replace it. Route the cable to the carburetor, feed it through the bottom hole of the throttle cable bracket, and the trunion. Use a small adjustable wrench and a 7mm combination wrench to tighten the trunion bolt. Check travel - make sure you get full range of motion, both wide open choke and closed choke. (Your choke cable can be shortened if you would like to route it more directly.)

**Illustration 37**

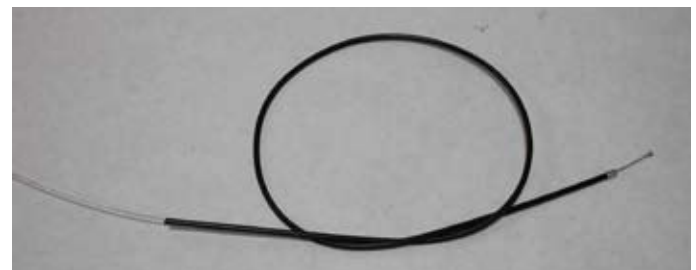


**38.** Install your new throttle cable. The new cable will have to be shortened. Cut the swaged lug off the end of the cable with the adjuster and remove the adjuster. Pull out the inner cable. Cut 4 1/4" off of the end of the cable jacket with the large plastic end. Lubricate the inner cable with automotive grade grease and slip back into the outer jacket starting with the uncut end. Install it in the car. It is very straight forward, just trace the old cable. The end with the swaged ball on it is the pedal end and the other end goes to the carburetor. Make sure it is not bent so much that the cable can not function properly.

**Illustration 38**



**Illustration 38 Cont**



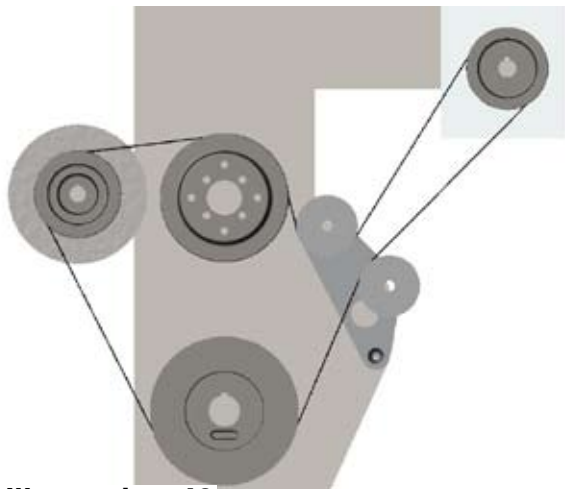
**39.** Slip the throttle cable through the top hole on the throttle cable bracket, over the bellcrank, and through the trunion. Lock the cable in with the trunion bolt. Cut off the excess cable, leaving 1 1/2" sticking through the trunion. Check travel - make sure you get full range of motion, both wide open throttle and closed throttle. (See Illustration 37)

**40.** Now, it's time to install the serpentine belt. Follow the belt path in the photo. Now tighten the generator with the adjuster system. Tighten so that when you press down on the belt between the upper idler and the supercharger there is



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approximately 1/2" of deflection. After 500 miles re-check the belt for tension, and periodically thereafter. Lock the jam nut on the adjuster and, using a 7/8" socket tighten the custom adjuster nut.



**Illustration 40**



**41.** Now hook up the valve cover vent. Use your factory hose, the barb adapter, and the supplied 5/16" hose. Install the barb into the 5/16" hose, and connect it to the straight end of the factory hose. Now install the hose assembly. The large end fits over the valve cover vent tube and the hose routes rearward along the valve cover then turns toward the carburetor. It then connects to the barb on the engine side of the carburetor, closest to the supercharger.

**Illustration 41**



**Illustration 41 Cont**

**42.** Hook up the vacuum advance using the 5/32in vacuum hose. For the recommended distributor, the hose connects to the "T" fitting in the vacuum hose that connects the supercharger bypass valve to the carb. adapter plate ("D" in the illustration). Route the hose behind the valve cover, to the distributor. We highly recommend using distributor #143-110. You may already have this distributor, which is great. If you don't, your existing distributor may not have an advance curve that is compatible with the supercharger. If you do not use the recommended distributor, see step 52. You may need to use some of the supplied vacuum caps, and on other cars you will need to hook up your evaporative system. Also, if you have a run-on valve, you will need to hook it up to the hose barb on the intake manifold. There are three ports on the manifold, one each for the run-on valve, boost gauge (#150-028), and vacuum brakes source. If your car has vacuum boosted brakes, you MUST use a check valve, #150-071. Also, do NOT plug the carburetor bowl vent. Either hook it up to the evap system with the supplied 7/32in hose or if your car does not have an evap system, you may also connect the carburetor vent hose to one of the original metal tubes that fasten to the engine and vent out at the bottom of the engine.



**Illustration 42**

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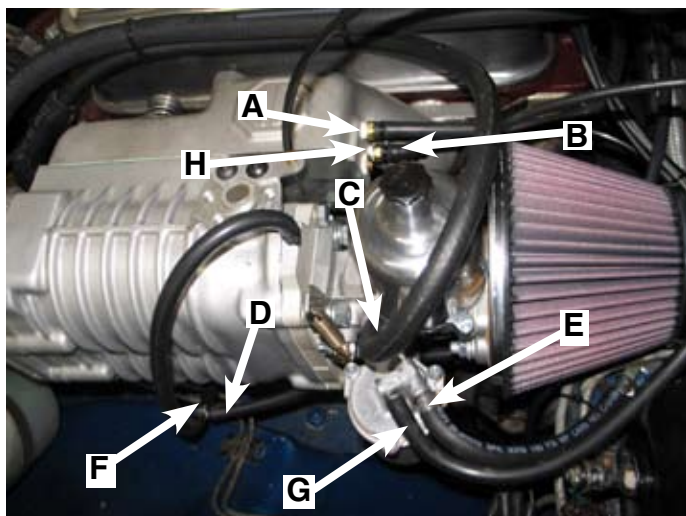
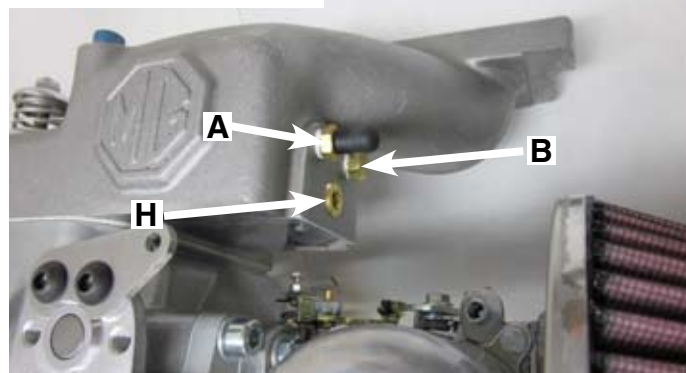


Illustration 42 Cont



## GLOSSARY:

- A** - To anti run-on valve
- B** - To boost gauge
- C** - To side cover vent
- D** - To vacuum on distributor (non-boosted manifold vacuum)
- E** - Fuel Inlet
- F** - Supercharger bypass valve
- G** - To charcoal (EVAP) canister or free air bowl vent
- H** - Port for vacuum assisted brakes

**43.** Time to re-install the radiator. Make sure you already have a lower radiator hose clamp on the lower hose. Slip the radiator into place and install the lower radiator hose. WD-40 will help the hose slip on easily. Align and start all the bolts. Work at it gingerly. Tighten the radiator bolts. Make sure that there is clearance between the hose and the idler pulleys, the belt system, and the chassis. If everything is OK, tighten the hose clamp. If not, you will need to twist (rotate)

the hose assembly to gain clearance. Then tighten the hose clamp. Use a 5/16" swivel socket, a long extension, and a 1/4" drive ratchet to tighten the hose clamp. Also make sure there are no kinks in the hoses.



Illustration 43



**44.** Now install the upper radiator hose, if your hose or clamps show any age, we highly recommend replacing them.



Illustration 44

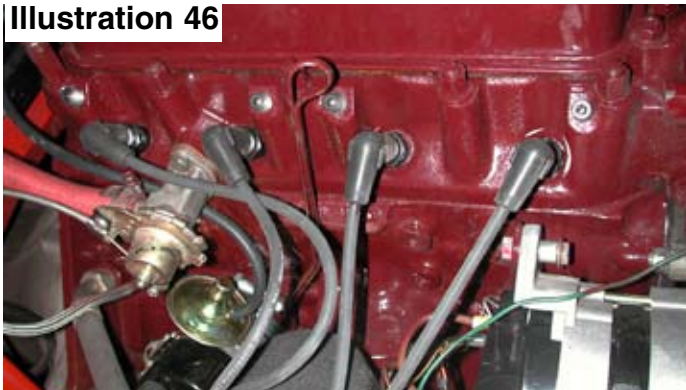
**45.** Double check all radiator hose connections and clamps, and refill your radiator with the proper mix of coolant and water. Re-install the radiator cap — check the cap, and replace it if it is no longer functioning at the indicated pressure.



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**46.** Install the supplied spark plugs. We recommend using anti-seize on the threads. The gap is .035IN. Again, we highly recommend installing new spark plug wires, points, condenser and the cap and rotor — all readily available from Moss Motors. You will use a 13/16" socket on the new plugs.

**Illustration 46**



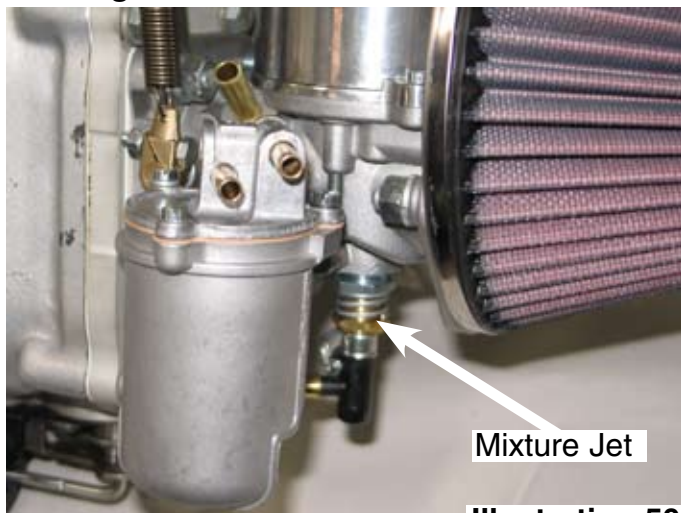
**47.** Double check everything, especially all bolts, connections and fuel line clamps.

**48.** Check that your fire extinguisher is close and in good working order.

**49.** Re-connect the battery ground cable. Turn the ignition to on, and your fuel pump should pressurize the fuel system. Turn the key off, and check very carefully for fuel leaks.

**50.** Pull the choke to the full on position. Do not depress the throttle pedal. Start the car. When the car starts for the first time with the supercharger, bring the engine up to 2200 RPM, as the car warms, reduce the choke amount until the car is warm enough to run without it. With the supercharger pushing volumes of air into the engine, you will have to use the choke more frequently and for longer periods of time than you may be used to. Do not roll into the throttle hard until the engine is fully warmed up, this can cause back-firing - the backfire valve is there to protect your engine as best it can. The mixture jet has been set 1 turn (6 flats) down from flush with the bottom of the carb. We found this to be a good initial setting. If your car is not idling smoothly, turn the jet in or out a few flats until the idle smooths out. Turning the jet down enriches the mixture and up leans out the jet mixture. As the engine smooths

out it may rev up and an adjustment must be made to the idle stop screw. **Use caution when working around the hot exhaust manifold.**



**Illustration 50**



**51.** After running it up to operating temperature, turn off the car and double check everything. Once it cools, you will need to re-check the coolant level.

**52.** Run your engine, and set your idle at 900 to 950RPM. Remove the vacuum advance, plug it, and set 13 degrees of timing, this is a conservative number, we recommend 15 degrees and found that 17 degrees was the most we could run in our 8:1 compression engine - you are free to experiment at your own risk. Test the timing: When driving under load, listen very carefully for engine knocking (detonation), if you hear any sort of knocking, you will need to retard your timing, and experiment. Our recommended numbers worked for the cars we tested, however every

# Installation Instructions

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MGB is a little different. If you want to experiment with additional timing, be very careful, and advance your timing 2 degrees at a time. Listen for knocks/detonation. A knocking engine will self-destruct fairly quickly.

The new HS-6 carburetor does not have a “ported vacuum” source. The difference between ported and manifold vacuum is that ported vacuum does not supply the distributor with vacuum (and therefore advance) at idle or closed throttle. The throttle must be depressed (the butterfly must be open) for vacuum to reach the distributor. Ported vacuum is in general used for smog purposes, I.E. less advanced (or more retarded) ignition timing at idle makes for a cleaner burn out of the tail pipe. Retarded ignition timing raises exhaust gas temperatures, keeping the catalyst hotter and more efficient.

Manifold vacuum is just as implied. Whatever vacuum is in the manifold is supplied to the distributor at all times regardless of throttle position. More timing at idle and light throttle applications makes for a smoother, quicker responding and cooler running engine. In a wide open throttle situation, manifold and ported vacuum are identical.

If your distributor was hooked up to ported vacuum try hooking it to manifold vacuum. You will need to experiment more with your base timing settings. Any change to base timing will impact the whole range. If you simply cannot get rid of the “tip in” detonation that may occur when transitioning from light to heavy throttle applications, unhook and cap off the distributor and vacuum source. You will only have centrifugal advance.

**53.** See MossMotors.com for all your MGA parts and performance needs! Enjoy!

**Warranty** - Moss Superchargers are warranted against defects in material and workmanship by Moss Motors, Ltd., for **12 months from the date of shipment** provided that there is no alteration or substitution of the provided components and configuration. we will replace defective components or refund your purchase price at our discretion. The warranty does not cover labor, failure of a related component, failure resulting from faulty installation,

failure resulting from the use of low octane fuel nor would the liability of Moss motors, Ltd., exceed the cost of the original supercharger kit. For warranty repairs, contact your selling dealer. Warranty for all components must be supported by the proper registration documentation including the original purchase invoice.



# Installation Instructions



**Moss Motors, LTD**  
440 Rutherford Street  
P.O. Box 847  
Goleta, California 93117

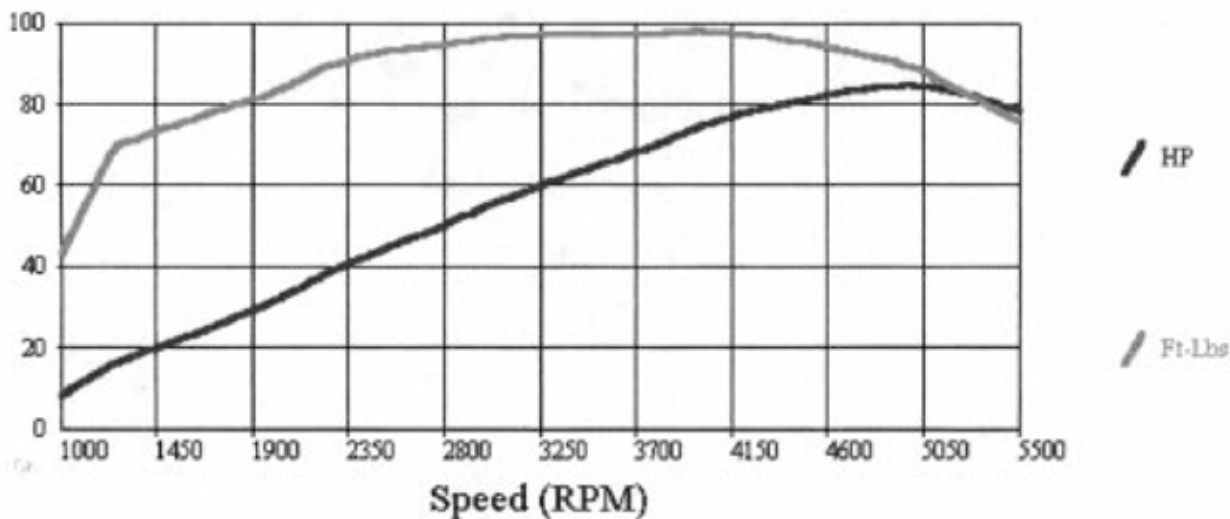
www.mossmotors.com

Customer	: Moss Motors, ,	Miles	: Lots
License	: Secret	Weight	: 0.0
VIN	:	HP @ 50 MPH	: 0.00
Yr/Mk/Mdl	: 1960 MG A	Cyl/Disp.	: 4/1600
Comments	:		

## HorsePower Curve Test Results

Test Run	: 12/29/2003 12:00:05 PM
Max Power	: 85.1 @ 5000 RPM
Max Torque	: 98.2 @ 4000 RPM

Comments :



# Installation Instructions

## Bill of Materials for 150-040

Item No.	Description	Quantity
988-380	INTAKE & S/C ASSEMBLY, MGA,HS6	1
051-207	SCREW, AHCS, M8 X 1.25 X 25	4
051-203	PLUG, PIPE, 1/8 NPT, HEX HEAD	1
051-438	SPRING, AFPR	1
051-446	NUT, STANDARD, 5/16-18	4
052-835	GASKET, OUTLET, M45 GEN4	1
052-834	GASKET, INLET, M45/MP62 GEN4	1
051-551	HOSE, VACUUM, 7/32 IN., BULK	15
051-587	WASHER, LOCK, 5/16 IN.	6
051-719	O-RING, VITON, NO. 202	1
051-720	O-RING, VITON, NO. 218	1
051-074	WASHER, FLAT, M8	4
053-150	MANIFOLD, SUPERCHARGER TO HEAD	1
052-512	PULLEY, MGA S/C, 2.75OD, 4-RIB	1
052-838	S/C GEN4 MP45CW,NO NOSE PULLEY	1
052-836	ADAPTER, SU HIF 44 TO M45 GEN4	1
051-142	HOSE BARB, 5/32 VACUUM	1
053-308	CARB, FIN, SU HS6, MGB S/C MOD	1
053-228	SCREW, AHCS, M8 X 1.25 X 90	1
051-736	SCREW, AHCS, M8 X 1.25 X 50	1
052-947	BOLT,BHCS,M8X1.25X25,ZINC	2
052-247	STUD, 5/16-18 X 1.25	4
052-257	PLUG, PIPE,1/4 NPT,SOCKET HEAD	1
052-840	GASKET, HIF44 TO MANIFOLD	1
770-572	VALVE BODY, POP-OFF	1
770-573	RETAINER, SPRING	1
770-576	STUD, POP-OFF VALVE	1
770-577	NUT, NYLOC, 1/4-28	1
053-314	BRACKET, THROTTLE CABLE, MGB	1
051-147	SCREW, BHCS, M8 X 1.25 X 16	2
053-282	THROTTLE SPRING, TR3-4 SC	1
053-251	RETURN SPRING BRACKET, TR3	1
375-128	CABLE STOP	2
051-917	HOSE BARB, 1/8NPT X 3/16	1
051-016	CABLE TIE, 4IN.	4
051-389	TEE, VACUUM, 3/16	1
051-151	CAP, VACUUM, RUBBER, 5/32	3
051-242	CAP, VACUUM, RUBBER, 5/16	1
322-290	BOLT, 5/16 UNF X 1, G5	2
052-339	NUT, STANDARD, 5/16 UNF	2



# Installation Instructions

Item No.	Description	Quantity
053-290	AIR FILTER & PLATE, MGB SC HS6	1
988-935	HARDWARE AND HOSE BAG	1
051-081	WASHER, FLAT, M10	2
051-627	PULLEY, 2.0IN IDLER, NYLON	2
052-092	PLATE, IDLER	1
052-093	SPACER, IDLER PLATE	3
052-240	SPACER, IDLER, .310	2
771-645	NUT, NYLOC, 3/8-16	2
771-668	WASHER, FLAT, D SHAPED, 3/8	1
772-533	SCREW, ALLEN DRIVE, 1/4-28X2 1/4	3
772-534	NUT, NYLOC JAM, 1/4-28	3
324-590	WASHER, FLAT, 1/4 IN	3
771-670	BOLT, HEX HEAD, 3/8-16 X 2	1
771-671	BOLT, HEX HEAD, 3/8-16 X 2-1/4	1
052-506	BRACKET, HOSE, MGA S/C	1
051-588	WASHER, FLAT, 5/16 IN., SAE	4
052-089	ADJUSTER BASE	1
052-505	ADJUSTER BLOCK, MGA	1
052-091	ADJUSTER LOCK BOLT	1
052-250	BOLT, HEX, 5/16-24 X 2.5	1
052-251	NUT, JAM, 5/16-24	1
052-252	BOLT, HEX, 5/16-18 X 1.0	2
052-268	ADHESIVE, FUTURE GLUE GEL	1
052-277	SHIM, MANIFOLD, 0.14 THICK	8
052-278	SHIM, MANIFOLD, 0.06 THICK	8
052-279	SHIM, MANIFOLD, 0.03 THICK	8
052-280	SHIM, MANIFOLD, 0.02 THICK	8
220-136	REMOVABLE THREADLOCKER, BLUE	1
460-470	WASHER	1
770-055	CABLE TIE, 6 IN.	6
771-530	NUT, NYLOC, 5/16-18 THREAD	1
052-501	PULLEY, WATER PUMP, MGA S/C	1
051-151	VACUUM CAP, 5/32	3
051-190	CLAMP, HOSE, SAE NO. 6	4
051-191	CLAMP, HOSE, MINI, SAE NO. 4	3
051-257	HOSE, HEATER, 1/2 IN., BULK	19
051-259	HOSE, VACUUM, 5/32 IN., BULK	36
051-261	HOSE, FUEL, HP, 1/4 IN., BULK	10
051-262	HOSE, FUEL, HP, 5/16 IN., BULK	10
051-551	HOSE, VACUUM, 7/32 IN., BULK	24
052-248	ADAPTER, HOSE BARB, 5/16 TO 1/2	1
052-254	CLAMP, HOSE, SAE NO. 20	4
324-660	WASHER	1

# Installation Instructions

Item No.	Description	Quantity
376-320	HOSE, FUEL PIPE TO CARB	1
434-485	HOSE, 1 1/8 DIAMETER	5
470-040	BRANCH PIPE, WATER PUMP TO RAD	1
470-310	HOSE, RADIATOR, LOWER	1
473-080	UNION, WATER BRANCH PIPE	1
052-503	PULLEY, GENERATOR,MGA SC,4-RIB	1
052-502	PULLEY, CRANK, MGA S/C, 4-RIB	1
520-515	SPEEDI-SLEEVE, TIMING COVER	1
052-507	BELT, GATES, K040575	1
331-350	CABLE, CHOKE, KNOB W/ C	1
052-504	SPARK PLUG, NGK 2023 BPR7ES	4
052-317	GASKET, SU HIF 44-AIR FILTER	1
052-336	BOTTLE, FLUID, 2 OZ	1
052-509	OIL, SAE 50 WEIGHT	2
052-343	FUEL FILTER, UNIVERSAL	1
297-535	GASKET, MANIFOLD, PREMIUM	1
071-130	CABLE, THROTTLE	1
771-667	BRACE, SUPERCHARGER	1
413-010	MOUNT, ENGINE, R/H	1
413-020	MOUNT, ENGINE, L/H	1
473-040	PIPE, HEATER TO PUMP, COPPER	1
434-180	THERMOSTAT	1
296-381	GASKET, THERMOSTAT HOUSING	1
053-321	ARM, THROTTLE RETURN SPRING	1
372-690	ADAPTER, BOWL TO THROTTLE BODY	1
371-060	NEEDLE AND SEAT KIT	1
053-295	SPRING, CARB	1
378-420	FLOAT LID ASS'Y HS	1