



FUEL KITS P/N 526-1 & 526-2

NOTE: These instructions must be read and fully understood before beginning installation. If this manual is not fully understood, installation should not be attempted. Failure to follow these instructions, including the pictures may result in subsequent system failure.

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1.0 INTRODUCTION

Holley® Performance Products has written this manual for the installation of the **Holley® EFI Fuel Kits**. This manual contains the information necessary for the installation. Please read all the **WARNINGS, NOTES, and TIPS**, as they contain valuable information that can save you time and money. It is our intent to provide the best possible products for our customer; products that perform properly and satisfy your expectations. Should you need information or parts assistance, please contact our technical service department at 1-270-781-9741, Monday through Friday, 8 a.m. to 5 p.m. Central Time. By using this number, you may obtain any information and/or parts assistance that you may require. Please have the part number of the product you purchased when you call.

2.0 WARNINGS, NOTES, AND NOTICES

NOTE: This fuel kit is designed for applications with a single fuel tank.

WARNING! For the safety and protection of you and others, only a trained mechanic having adequate fuel system experience must perform the installation, adjustment, and repair. It is particularly important to remember one of the very basic principles of safety: fuel vapors are heavier than air and tend to collect in low places where an explosive fuel/air mixture may be ignited by any spark or flame resulting in property damage, personal injury, and/or death. Extreme caution must be exercised to prevent spillage and thus eliminate the formation of such fuel vapors.

WARNING! This type of work **MUST** be performed in a well-ventilated area. Do not smoke or have an open flame present near gasoline vapors or an explosion may result.

DANGER! Before disconnecting or removing fuel lines, ensure the engine is cold. Do not smoke. Extinguish all open flames. An open flame, spark, or extreme heat near gasoline can result in a fire or explosion causing property damage, serious injury, and/or death.

3.0 ADDITIONAL ITEMS REQUIRED FOR INSTALLATION

- -8AN Hose & fittings from the tank to pre-filter
- Hose & fittings from return back to the tank
- O-ring lubricant (petroleum jelly or dab of oil)
- PTFE paste – Earl's® D024ERL, Loctite® 567, or similar
- Rubber coated steel -6/-8 hose mounting clamps
- Two sets of filter mounting brackets Holley ® P/N 162-573 or similar

4.0 PARTS IDENTIFICATION

ITEM	DESCRIPTION	QTY	SERVICE PART
1	Billet In-Line Fuel Pump	1	12-600
2	Billet Fuel Pressure Regulator	1	12-846
3A	Kit 526-1 Perform-O-Flex™ Stainless Steel Hose (per ft.)	20	400060ERL
3B	Kit 526-2 Pro-Lite 350™ Black Hose (per ft.)	20	350006ERL
4	100 GPH Billet Fuel Filter 10 micron	1	162-550
5	100 GPH Billet Fuel Filter 100 micron	1	162-551
6	-6 AN Male to 9/16"-18 O-Ring Port	1	AT985006ERL
7	-8 AN Port Plug O-Ring Seal	1	AT981408ERL
8	-6 AN Male to 3/4"-16 O-Ring Port	2	AT985068ERL
9	Straight 3/8" NPT Male to -6 Hose	2	AT820166ERL
10	Straight -8 AN Swivel to 3/8" Male NPT	1	AT916108ERL
11	Swivel Seal™ Straight -6 Female to -6 Hose	2	AT800106ERL
12	Swivel Seal™ 90° -6 Female to -6 Hose	2	AT809106ERL
13	Fuel Pump Block-Off Plate & Gasket	1	12-813
14	Straight 3/8 NPT Male to -8 Hose	1	AT820108ERL
15	-8AN Male to 7/8"-14 O-ring Port	1	AT985081ERL

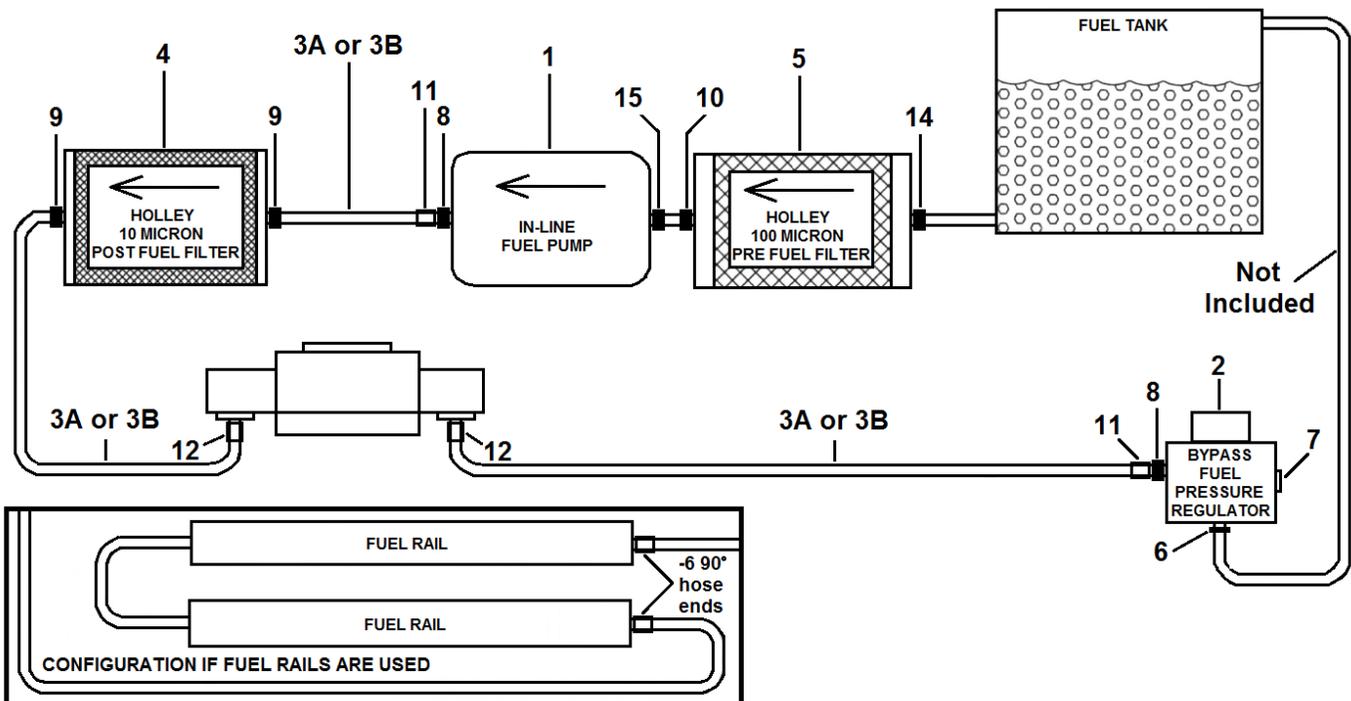
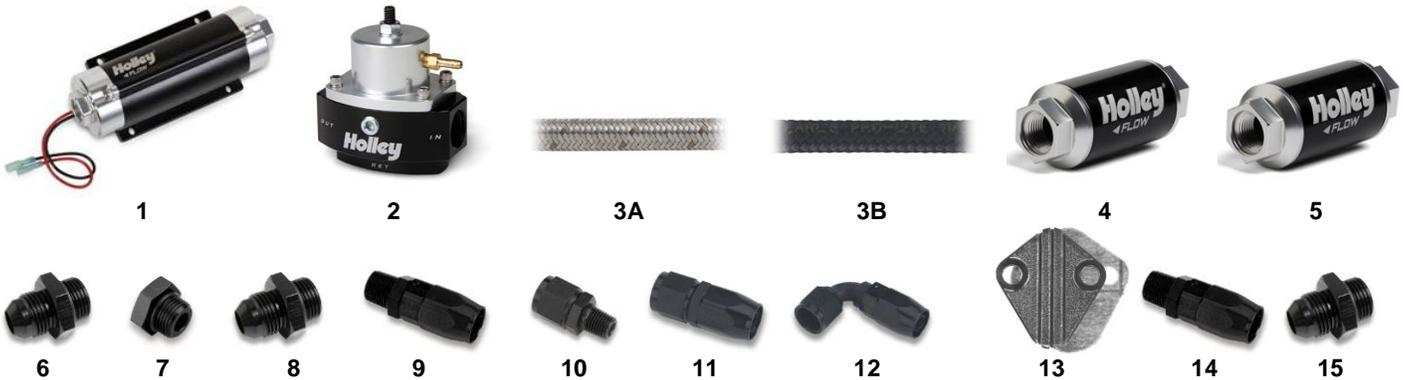


Figure 1

5.0 FUEL PUMP, FUEL LINE, & FILTER INSTALLATION

DANGER! Never get under a vehicle supported only by a jack. Serious injury or death can result from vehicles falling off of jacks. Before working underneath a vehicle, support it solidly with jack stands.

5.1 Choose Fuel Pump & Pre-Filter Mounting Location

1. Choose a rigid location to securely mount the pump and pre-filter.
2. This location should be as close to the fuel tank as possible.
3. Do not mount the fuel pump higher than the lowest point of the fuel tank. Mounting the fuel pump in this manner will insure that the pump will prime easily and purge fuel vapors in the system quickly to ensure faster starts.

DANGER! Ensure that the fuel pump mounting location will not interfere with any under the vehicle components, especially at the extreme limits of the suspension travel. A fire or explosion hazard could cause serious injury or death.

DANGER! Take precautions to ensure that all fuel line routings are away from heat sources, such as the engine or exhaust pipes. A fire or explosion hazard could cause serious injury or death.

5.2 Mounting & Plumbing Fuel Pump & Pre-Filter

1. There are two filters included with this kit. The pre-filter (P/N 162-551) **MUST** be installed between the fuel tank and the fuel pump inlet. The purpose of this filter is to protect the fuel pump from particles of dirt or other foreign material. The filter should be installed with the arrow on the filter pointing in the direction of the fuel flow. Take care to note each filter's part number when unpackaging as these two filters externally appear identical are not marked.

WARNING! Ensure each filters are installed in the proper direction. A flow direction arrow is printed on the side of the filter to indicate the direction of fuel flow. Failure to do so will result in a system malfunction with possible pump failure.

2. Mount the fuel pump first. Note the flow direction on the pump. There is a mounting template supplied with the pump. Plumb the pre-filter (P/N 162-551) directly to the input side of the pump using (1) AT985081ERL and (1) AT916108ERL before mounting the filter.

NOTE: Use PTFE paste on all pipe threads and o-ring lubricant on all o-ring seals. **DO NOT** use PTFE tape.

NOTE: Anchor all fuel lines securely to solid chassis members at 1 ½ foot intervals using rubber coated steel clamps (not supplied). Use of only approved steel fuel line tubing will afford maximum fuel line protection against road hazards and premature wearing due to flexing, temperature extremes, road salt, weather, etc.

3. Mount the pre-filter with Holley® filter brackets P/N 162-573 (not supplied) or fabricated brackets. Make certain the fittings connecting the pump and filter are not in a bind or damage and leaks may occur.

5.3 Wiring the Fuel Pump

1. Follow the wiring instructions supplied with Holley® P/N 12-600 fuel pump.

5.4 Plumbing Fuel Tank to Pre-Filter

1. Make sure the fuel tank is properly vented.
2. As fuel tank connections are different depending on application, the installer must determine the best way to connect with the tank. Make certain all connections are secure and free from leaks.
3. Use hose fitting (1) AT820108ERL to adapt the input of the pre-filter to the Earl's® -8 hose (not included). This fitting is only to be used with acceptable Earl's® hoses, but hose allowance from the pre-filter to the fuel tank is not included with this kit.
4. See section 6.0 for fitting to hose assembly.

NOTE: A minimum of 3/8" line should be used on the feed/pressure side of the system. If using steel line, rubber hose (rated for use with fuel injection) can be used to connect the steel line to the pump and filters. You should not connect a rubber hose directly to a steel line unless the end of the line has a "bead/nipple" or barb that retains the hose. If the steel line is just cut off, purchase a compression fitting that a barbed hose end can be installed on, or use a tool to roll a bead/nipple on the end of the steel line. All fuel hoses used must meet SAE J30 performance standards. All steel fuel line must meet SAE J526 standards. If using the existing fuel lines, inspect and replace any hose, clamps, or fuel line showing ANY sign of aging.

5.5 Mounting & Plumbing Post-Filter

1. The second fuel filter (P/N 162-550) that is included with this kit should be installed between the electric pump outlet and the EFI system's fuel rails. This is a 10 micron EFI filter.

2. Position the filter, so the fuel hoses can be routed without kinks or sharp bends. The filter should be installed with the arrow on the filter pointing in the direction of the fuel flow.
3. Mount the post-filter with Holley® filter brackets P/N 162-573 (not supplied) or fabricated brackets.
4. Plumb the fuel pump to the post-filter using the supplied hose. Use parts (1) AT985068ERL and (1) AT800106ERL at the pump and (1) AT820166ERL at the post-filter inlet.
5. See section 6.0 for fitting to hose assembly.

5.6 Mounting & Plumbing Regulator

1. If you plan to install a fuel pressure gauge, do so at this time.
2. Holley® recommends plumbing the regulator after the fuel rails. Using the supplied bracket, mount the regulator as close to the fuel rail as possible taking care to minimize exposure to heat. DO NOT mount the regulator on the exhaust manifold or any extremely hot surface.
3. Plug one of the regulator's two inputs with (1) AT981408ERL. Use adapter (1) AT985068ERL, hose ends (1) AT800106ERL, and (1) AT820166ERL to plumb the post-filter output to the regulator inlet.

5.7 Plumbing Return Line

NOTE: Holley® *EFI* systems require a return fuel line to the fuel tank. Some late model vehicles that were originally equipped with a throttle body injection system may already have a return line to the fuel tank that can be utilized. If a return fuel line must be installed, a minimum size of 5/16" I.D. is recommended. The return line must not present a pressure restriction to the return fuel flow. There should never be more than approximately 3 PSI of pressure in the return line. A line that is too small, or has restrictions will cause tuning problems with the system.

DANGER! Do not use the vapor canister lines as a fuel return line. Possible fuel leaks may create a fire or explosion hazard, causing serious injury or death.

WARNING! Use only approved steel fuel line. The return fuel line should enter the fuel tank at the "fuel level sending unit flange" or at the "filler neck". The filler neck or sending unit must be removed from the tank to perform this operation.

DANGER! Proper installation of the fuel return line may necessitate complete removal of the fuel tank. This work should be done by a fuel tank specialist, who regularly does this work and is familiar with safety regulations and precautions necessary to do this work. If a person attempts this work that is not familiar with the safety regulations and precautions, an explosion hazard may result causing serious injury or death.

DANGER! Failure to use a fuel hose that meets SAE J30 standards could result in fuel leaks. A fuel leak may result in a fire or explosion hazard, which could cause serious injury or death.

DANGER! Failure to use a steel fuel line that meets SAE J526 standards could result in fuel leaks. A fuel leak may result in a fire or explosion hazard, which could cause serious injury or death.

DANGER! Take precautions to ensure that all fuel line routings are away from heat sources, such as the engine or exhaust pipes. A fire or explosion hazard could cause serious injury or death.

DANGER! Rigid fuel line tubing should be used for under vehicle runs, such as along vehicle frame rails or under floor pans. Failure to do so is a potential fire or explosion hazard, which could cause serious injury or death.

1. An adapter from the regulator's output to -6 male (1) AT985006ERL is supplied for the return line to the tank. No additional hose or fittings are supplied for the return.
2. As fuel tank connections are different depending on the application, the installer must determine the best way to connect with the tank. Make certain all connections are secure and free from leaks.

5.8 Plumbing Fuel Rails

1. This fuel kit can be used with numerous different EFI systems. Typical installation will have fuel flow looped through the fuel rails (Figure 1).
2. Use (2) AT809106ERL 90° hose ends at each end of the looped fuel rails.

5.9 Inspect for Leaks

1. After fuel system assembly is complete, switch on the fuel pump, but do not start the engine, and inspect all connections and components for leaks.

6.0 HOSE ASSEMBLY INSTRUCTIONS

1. Cut the hose to the required length (Figure 2-1).
 - A. Measure the distance between ports or adapter fittings long the path that the hose run will follow – allowing for bend radius, hose end length, and offset to obtain length and hose required.
 - B. Cut the hose square with a cut-off wheel or a sharp 32 teeth per inch hacksaw blade. It is necessary to wrap it tightly with electrical or masking tape before cutting and to cut through the tape. This helps prevent the stainless wire from fraying.
 - C. Trim any frayed ends of the braid with a sharp pair of metal snips or diagonal cutters and remove the tape.
2. Place the socket in a vise and insert the end of the hose into the socket until the hose butts against the bottom of the threads provided for the cutter. Gently pull the hose back until there is a 1/16" to 1/8" gap between the end of the hose and the bottom of the threads – mark the hose at the bottom of the socket with a felt pen (Figure 2-2) so that you can detect any tendency of the hose to be pushed out as you complete the assembly.
3. Lubricate the inside of the hose, the cutter threads, and the socket threads with Earl's assembly lube or engine oil (Figure 2-3). Place the nipple in a vise.
4. Holding the hose and not the socket, push the hose and the socket onto the nipple until the socket threads can be started on the cutter (Figure 2-4). Holding the hose and not the socket, start the threads and go as far as you can by hand. Depending on the size of the hose, some force may be necessary in this part of the operation.
5. To complete the assembly, it won't matter whether the nipple or the socket is held in the vise. Holding one or the other in the vise and using a suitable wrench on the other, tighten the socket onto the cutter threads until the socket is within .060" of bottoming on the nipple (Figure 2-5). Do not use an adjustable or over-size wrench or you will damage wither the nipple or the socket.
6. Check the mark that you made on the hose in Step 2. If the hose has backed more than about 1/16" out of the socket as you assembled it, return to Step 3. Clean the hose and hose ends with CLEAN solvent.
7. **Pressure test the assembly before installation.** Further check the assembly by running the system at full pressure while you observe the hose, hose ends, and adapters for leaks.

SWIVEL-SEAL™ HOSE ENDS WITH PERFORM-O-FLEX™ OR PRO-LITE 350™



Pressure Test All Hose Assemblies
Before Installation!

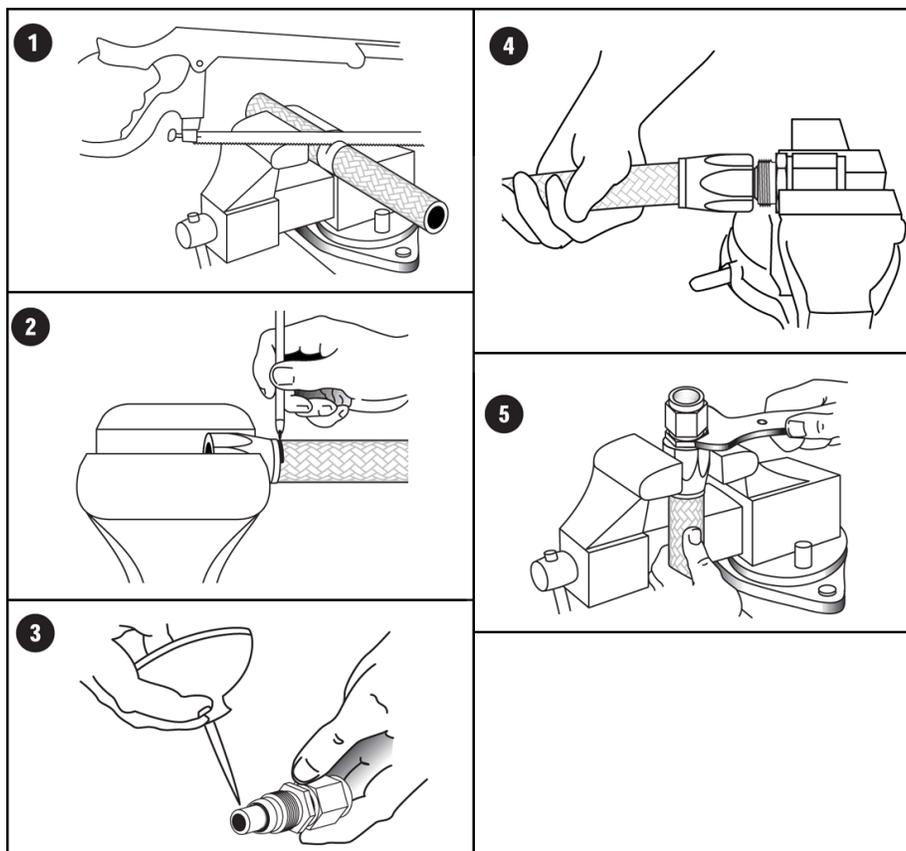


Figure 2

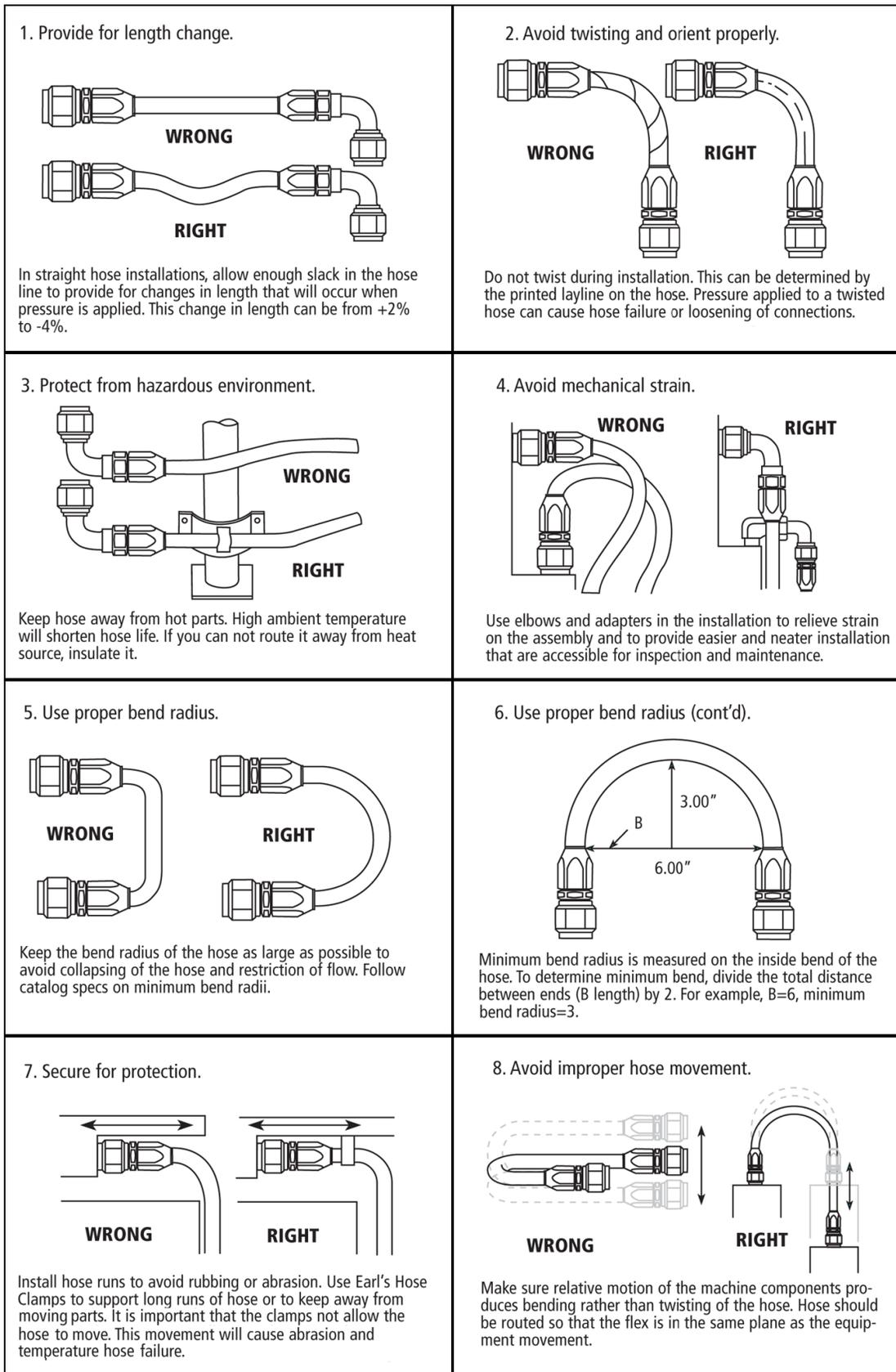


Figure 4

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