FUEL KITS
P/N 526-3 & 526-4

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.**

CONTENTS:

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

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

- Hose and fittings from the tank to the fuel filter
- Hose and fittings from the return back to the tank
- Rubber coated steel clamps

4.0 PARTS IDENTIFICATION

4.1 Kit 526-3 Parts List

ITEM	DESCRIPTION	QTY	SERVICE PART
1	Universal Electric Fuel Pump	1	12-920
2	Billet Fuel Pressure Regulator	1	12-846
3	Bulk Hose (black) Size 6, ID .375, OD .625 (per ft.)	20	780006ERL
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	1	AT985068ERL
9	Straight Male AN -6 to 3/8” NPT	3	AT981666ERL
10	Straight -6 AN Female Swivel Coupling	1	AT916166ERL
11	Super Stock Straight -6 Female to 3/8” Barb	6	AT700167ERL
12	Super Stock 90° -6 Female to 3/8” Barb	2	AT709167ERL
13	-6 Fitting for 12-920 Pump	2	26-160
14	Fuel Pump Block-Off Plate & Gasket	1	N/A


1

2


3

4

5


6


7


8


9


10


11


12


13


14

4.2 Kit 526-4 Parts List

ITEM	DESCRIPTION	QTY	SERVICE PART
1	Universal Electric Fuel Pump	1	12-920
2	Billet Fuel Pressure Regulator	1	12-846
3	Bulk Hose (black) Size 6, ID .375, OD .625 (per ft.)	20	780006ERL
4	Post Fuel Filter 10 micron	1	Holley P/N 562-1 or NAPA P/N 3482
5	Pre Fuel Filter 20 micron	1	NAPA P/N 3033
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	1	AT985068ERL
9	Hose Clamp, Size 8	8	N/A
10	Super Stock Straight -6 Female to 3/8” Barb	2	AT700167ERL
11	Super Stock 90° -6 Female to 3/8” Barb	2	AT709167ERL
12	Fuel Pump Block-Off Plate & Gasket	1	N/A


1

2


3


4


5


6


7


8


9


10


11


12

5.0 FUEL PUMP, FUEL LINE, & FILTER INSTALLATION

NOTE: If you have dual fuel tanks, you must purchase Holley PN 534-38.

The following section covers the installation of an in-line pump. Holley in-line fuel pump P/N 12-700 is included with this kit. Holley also includes both a pre and post filters. See **Figure 2 & 3** for installation diagrams.

1. Do not mount the fuel pump higher than the lowest point of the fuel tank.

2. Make sure fuel tank is properly vented.

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.

3. Mount the electric fuel pump as close to the fuel tank outlet as possible with the bracket provided. Mounting the fuel pump in this manner will insure that the pump will prime easily and purge fuel vapors in the TBI quickly to ensure faster starts.

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! 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.

4. There are two filters included with this kit. The pre-filter **MUST** be installed between the fuel tank and the fuel pump inlet (unless an in-tank pump is used). 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.

5. The post-fuel filter should be installed between the electric pump outlet and TBI unit. This is a 10 micron EFI filter. 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 (Figure 1).

Figure 1

WARNING! Ensure both 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.

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

6. Plumbing must now be installed to connect the fuel tank to the filters, pump, and TBI unit. See **Figure 2**.

7. 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.

8. If you plan to install a fuel pressure gauge, do so at this time. TBI systems are designed for an operating pressure of 21PSI. Although this is factory pre-set, it is ideal that it be checked.

9. If using the existing fuel lines, inspect and replace any hose, clamps, or fuel line showing **ANY** sign of aging.

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.

10. 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.

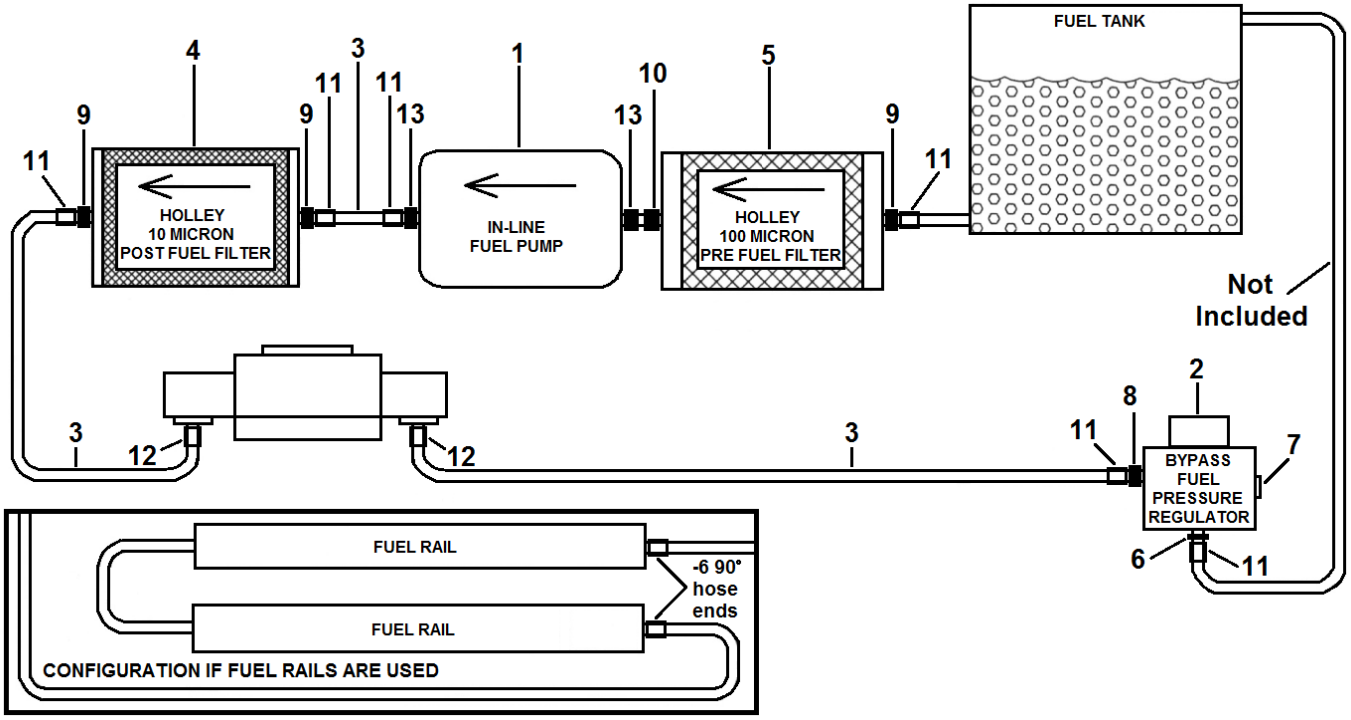


Figure 2 – KIT 526-3 (refer to 4.1 PARTS IDENTIFICATION)

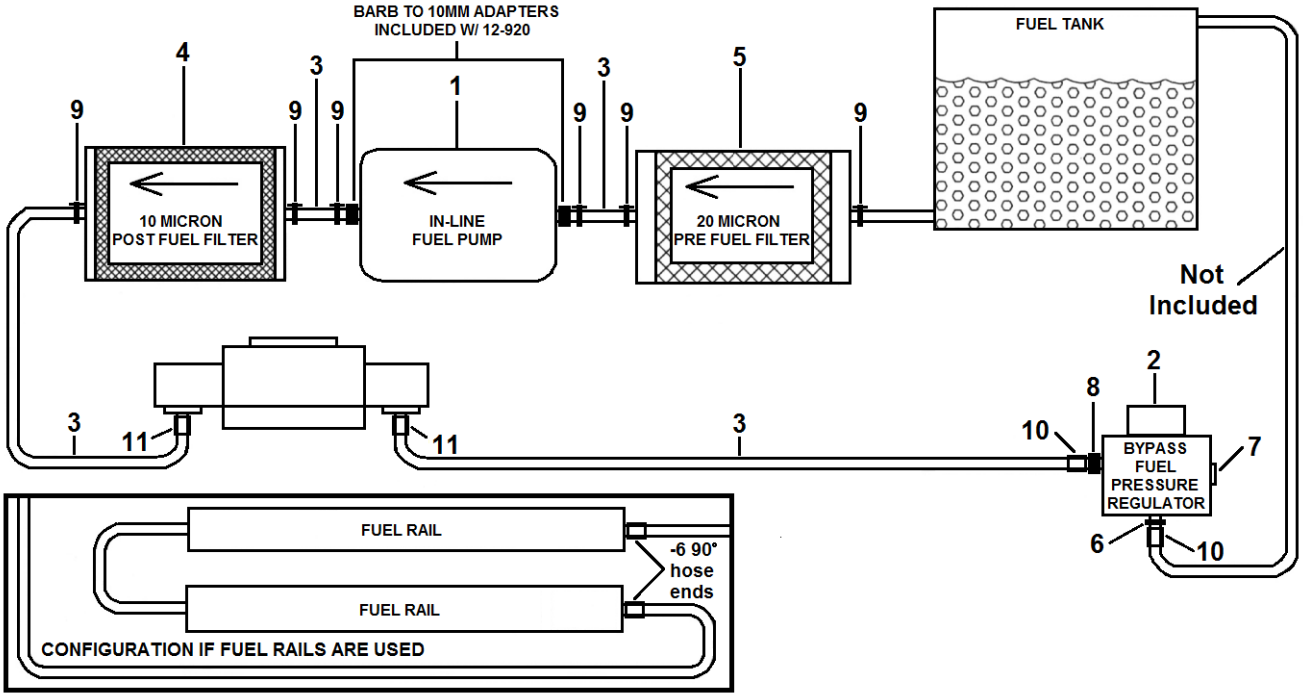


Figure 3 – KIT 526-4 (refer to 4.2 PARTS IDENTIFICATION)

6.0 RETURN LINE INSTALLATION

The Holley ***EFI*** TBI system requires 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, who is not familiar with the safety regulations and precautions, an explosion hazard may result causing serious injury or death.

7.0 HOSE ASSEMBLY INSTRUCTIONS

1. Cut the hose square with a sharp knife. (Figure 3-1).
2. Slip the aluminum collar over the hose.
3. Mark the hose at the back of the collar.
4. Lubricate the inside of the hose and the outside of the nipple. Use assembly lube or engine oil. Do not use a silicon-based lube.
5. Push the hose end into the hose until it bottoms.
6. Check the mark made on the hose is Step 3 to ensure that the hose end has indeed bottomed against the end of the hose.
7. Blow the assembly clean and pressure test before running the car.

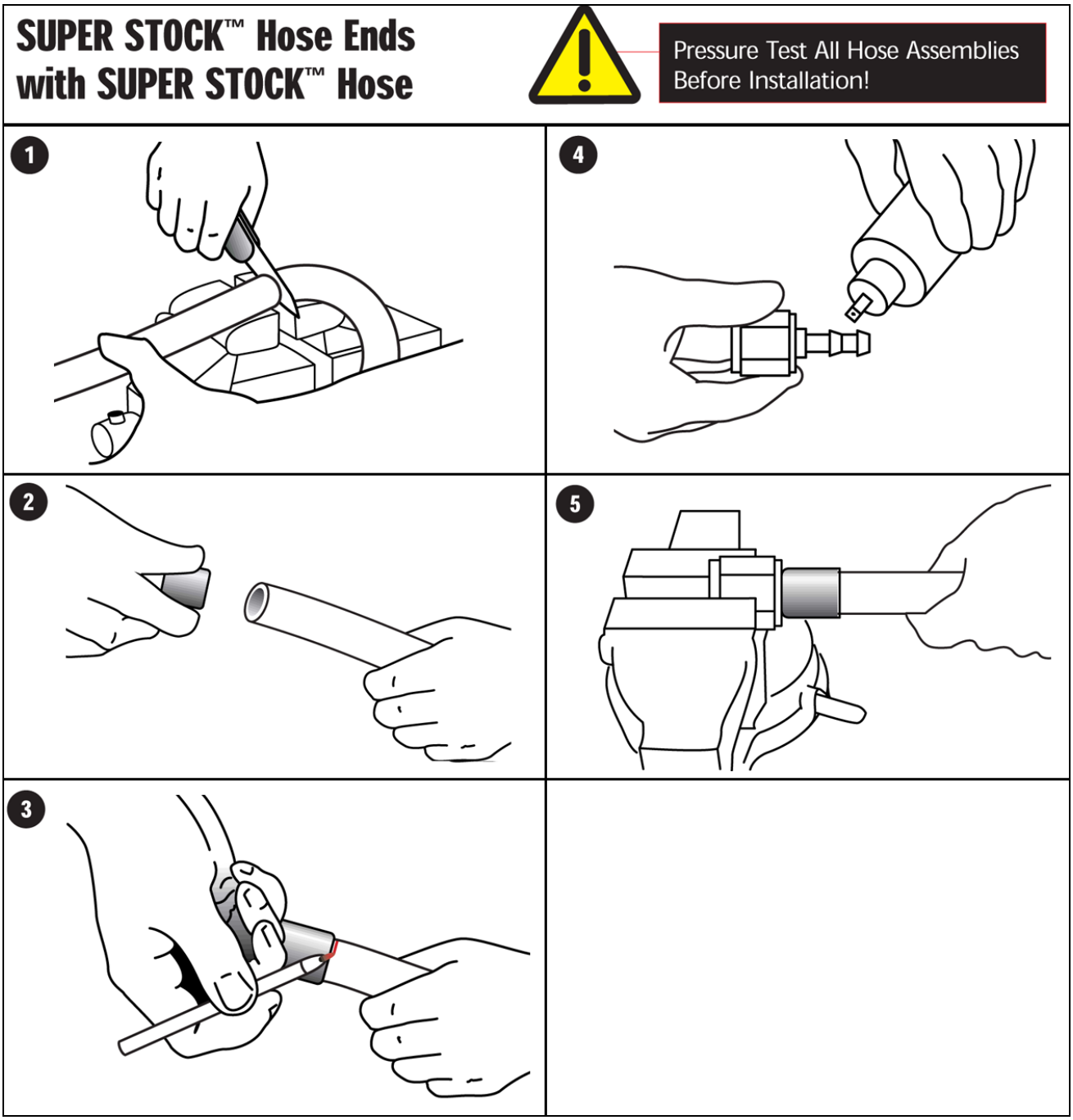
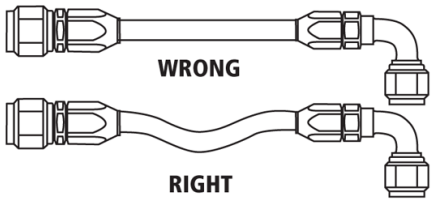


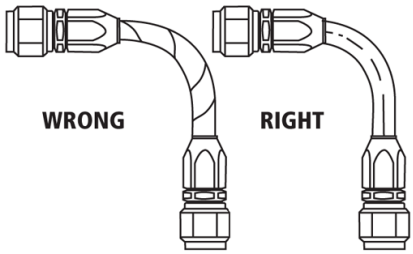
Figure 3

1. Provide for length change.



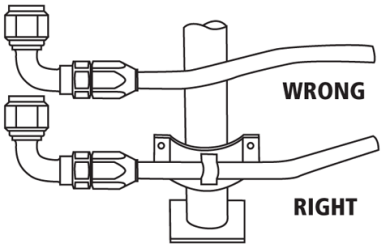
In straight hose installations, allow enough slack in the hose line to provide for changes in length that will occur when pressure is applied. This change in length can be from +2% to -4%.

2. Avoid twisting and orient properly.



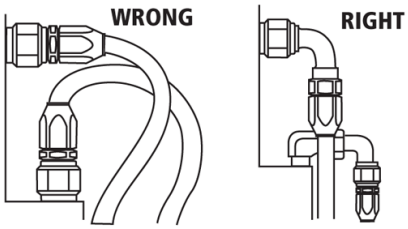
Do not twist during installation. This can be determined by the printed layline on the hose. Pressure applied to a twisted hose can cause hose failure or loosening of connections.

3. Protect from hazardous environment.



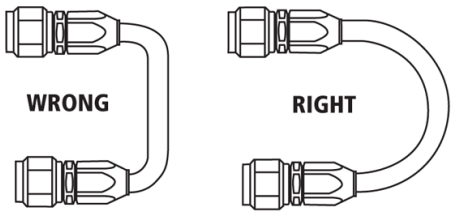
Keep hose away from hot parts. High ambient temperature will shorten hose life. If you can not route it away from heat source, insulate it.

4. Avoid mechanical strain.



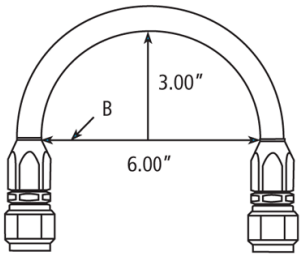
Use elbows and adapters in the installation to relieve strain on the assembly and to provide easier and neater installation that are accessible for inspection and maintenance.

5. Use proper bend radius.



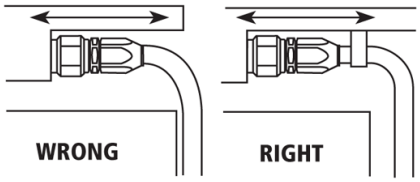
Keep the bend radius of the hose as large as possible to avoid collapsing of the hose and restriction of flow. Follow catalog specs on minimum bend radii.

6. Use proper bend radius (cont'd).



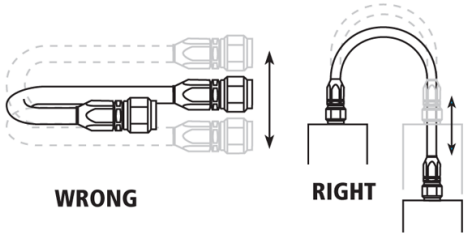
Minimum bend radius is measured on the inside bend of the hose. To determine minimum bend, divide the total distance between ends (B length) by 2. For example, B=6, minimum bend radius=3.

7. Secure for protection.



Install hose runs to avoid rubbing or abrasion. Use Earl's Hose Clamps to support long runs of hose or to keep away from moving parts. It is important that the clamps not allow the hose to move. This movement will cause abrasion and temperature hose failure.

8. Avoid improper hose movement.



Make sure relative motion of the machine components produces bending rather than twisting of the hose. Hose should be routed so that the flex is in the same plane as the equipment movement.

Figure 4

Holley Technical Support: 1-270-781-9741

199R10657
Date: 11-11-13