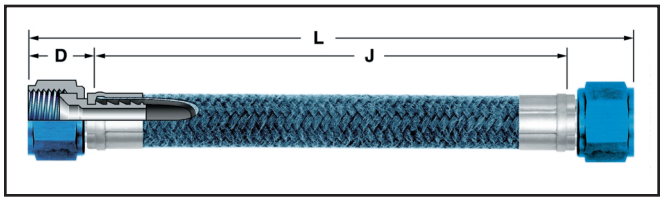
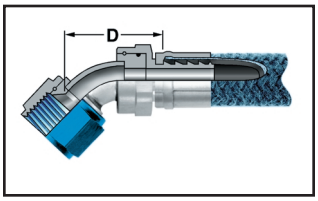
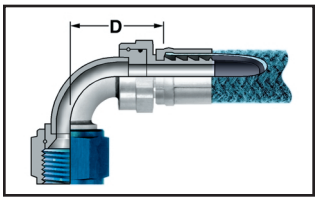
How To Determine Hose Assembly Lengths

To determine the “J” length (cut length of hose) from “L” length (overall length), deduct “D” dimensions of both end fittings. Consult fitting information tables for “D” dimensions.

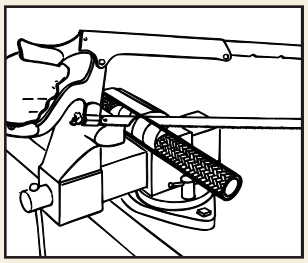
L = Overall Length
J = Cut Length of Hose
D = Fitting Length



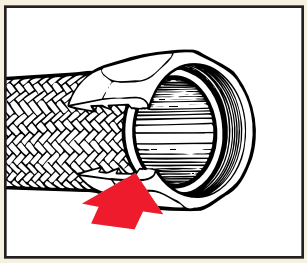




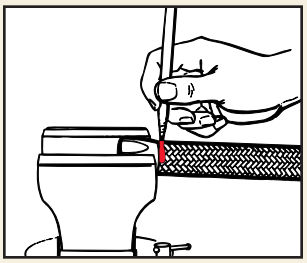
AQP® Racing Hose (with Reusable Fittings)



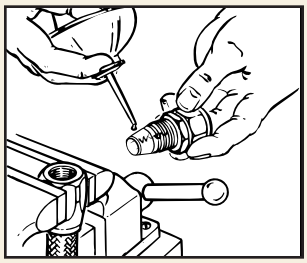
Step 1. Cut hose square to length with fine-tooth hack saw or cut-off wheel. To minimize wire braid flare out, wrap hose with masking tape and cut through tape. Remove tape before next step.



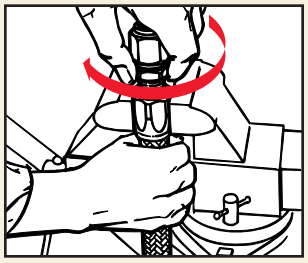
Step 2. Insert hose in socket with twisting, pushing motion until hose is in line with back of socket threads.



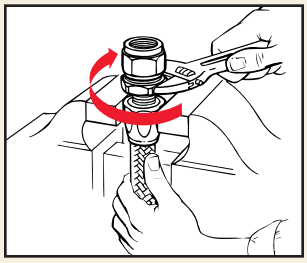
Step 3. Important—Mark position around hose at rear of socket with a grease pencil, paint or tape.



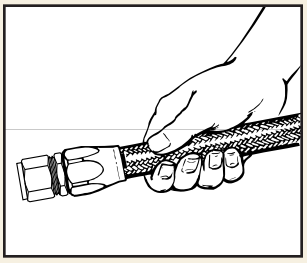
Step 4. Lubricate inside of hose and nipple threads liberally using S.A.E. 30 lubricating oil or Aeroquip FBM3553 Hose Assembly Lube.



Step 5. Carefully insert nipple and engage nipple and socket threads while holding hose in position with other hand. Make sure hose does not push out of socket by observing mark made in Step 3.



Step 6. Complete assembly using wrench while continuing to hold hose in position. Maximum allowable gap is .031 inches. Your thumbnail is a convenient measuring device.



Step 7. Important—Check hose for pushout by observing hose position mark. Pushout should not be evident. CLEAN, PROOF TEST TO TWICE OPERATING PRESSURE AND INSPECT ALL ASSEMBLIES. Disassemble in reverse order.

Aeroquip Hose Assembly Lube is a specially compounded lubricant superior to any other lubricant used in hose assembly work. Available in pint containers.

Use for either hand or machine assembly.

StartLite® Racing Hose (with Lightweight Crimp Fittings)

*Pro*Crimp® 1380 Crimp Machine

The *Pro*Crimp 1380 machine is designed to assemble StartLite and AQP® Racing Hose assemblies. It is electronically controlled to give fast, accurate crimps and incorporates programmable crimp settings and a simple die cage insertion to reduce setup time and errors.

*Pro*Crimp 1380 Target Settings

The target settings for Aeroquip crimp machines are provided to aid in establishing actual settings. While the settings on this chart will give crimp diameters close to, or at, specified value, the machine operator must check to verify the actual diameter. Before using these target settings, the crimp machine must be within proper calibration. If needed, consult your Aeroquip equipment manual for calibration procedures.

*Pro*Crimp 1380 Crimp Machine Target Settings

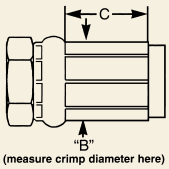
Hose Dash Size	Die Cage	Crimp Diameter (±.005 Inches)	Target Setting
		INCHES	
-04	-M120	.493	088
-06	-M150	.614	078
-08	-M150	.719	187
-10	-M210	.896	142
-12	-M240	1.020	116
-16	-M280	1.205	155
-20	-M370	1.465	040

Note: It is recommended that all hose assemblies be proof pressure checked at twice the operating pressure using a proof test stand such as the Aeroquip FT1058 stand.

To ensure a proper crimp, the StartLite Racing Hose (FBU) must have a clean cut with no frayed wire ends and must be fully inserted into the fitting. Follow target setting for the size of hose to be crimped. Check your crimp diameter with a dial caliper.

Crimp Diameter Measurement Locations

Diameter measurements are to be taken at the center (top to bottom, side to side) of the specified fitting selection.



Determining Crimp Diameter

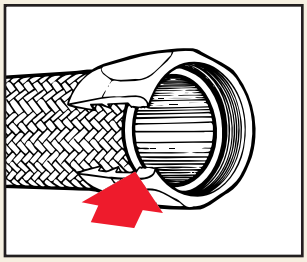
The crimp diameter is the average of the four diameter measurements around the fitting. These measurements are to be taken at the same relative locations indicated in the illustration above right..

$$\frac{\text{Measurement 1 + Measurement 2 + Measurement 3 + Measurement 4}}{4} = \text{Crimp Diameter}$$

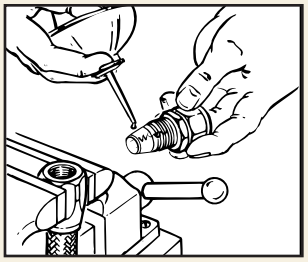
StartLite™

StartLite® Racing Hose (with Reusable Fittings)

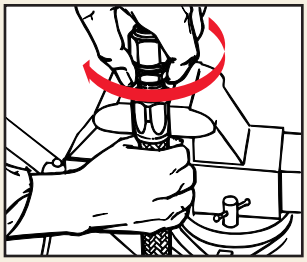
Step 1. Cut hose square to length with Aeroquip Cut Off Tool (FT1258) or similar cutting device.



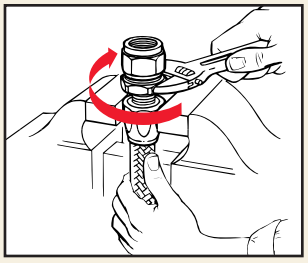
Step 2. Insert hose in socket with twisting, pushing motion until hose is in line with back of socket threads.



Step 3. Lubricate inside of hose and nipple threads liberally using S.A.E. 30 lubricating oil or Aeroquip FBM3553 Hose Assembly Lube.



Step 4. Carefully insert nipple and engage nipple and socket threads while holding hose in position with other hand. Make sure hose does not push out of socket.



Step 5. Complete assembly using wrench while continuing to hold hose in position. Maximum allowable gap is .031 inches. Your thumbnail is a convenient measuring device. Do not overtighten to a point where there is no gap.

Notes:

- Greater resistance can be expected as compared to Aeroquip's AQP® Racing Hose.
- To disassemble, reverse steps.
- It is recommended that all hose assemblies be proof pressure checked at twice the operating pressure using a proof test stand such as the Aeroquip FT1058 stand.

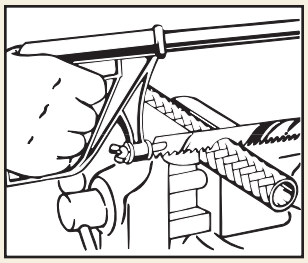
Aeroquip Hose Assembly Lube is a specially compounded lubricant superior to any other lubricant used in hose assembly work. Available in pint containers.

Use for either hand or machine assembly.

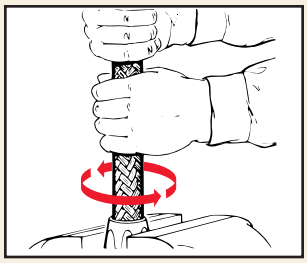
StartLite® Hose Routing Procedure

In most vibration applications, it may be necessary to restrain, protect, or guide the hose to protect it from damage caused by unnecessary flexing or contact with other mechanical components. Care must be taken to ensure such restraints do not introduce additional stress or wear points. StartLite® hose, when used with reusable fittings in a high vibration applications, should be supported approximately every 12 to 14 inches.

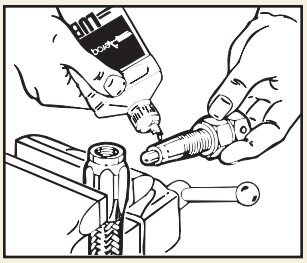
AQP® High Pressure Hose (Power Steering)



Step 1. Cut hose square with fine-tooth hacksaw or cut-off wheel.



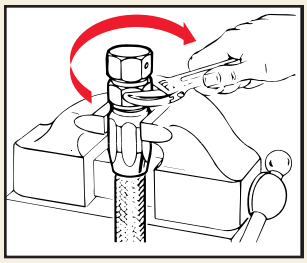
Step 2. Put socket in vise. Screw hose counterclockwise into socket until it bottoms. When assembling long lengths of hose, it may be preferred to put hose in vise just tight enough to prevent from turning, and screw socket onto the hose counterclockwise until it bottoms. Back off ¼ turn.



Step 3. *Male Ends:* Push assembly tool into nipple.

Swivel Ends: Tighten nipple and nut on assembly tool.

Lubricate nipple, mandrel and inside of hose liberally with Aeroquip assembly lube.



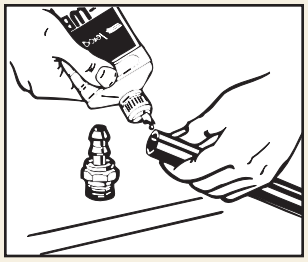
Step 4. *Male Ends:* Screw nipple clockwise into socket and hose. Leave a 1⁄32″ clearance between nipple hex and socket.

Swivel Ends: Screw nipple clockwise into socket and hose. Leave 1⁄32″ to 1⁄16″ clearance between nut and socket. Clean, proof test to twice operating pressure and inspect all assemblies.

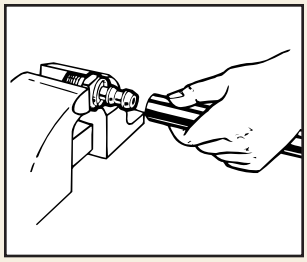
To disassemble: Reverse steps.

Note: It is recommended that all hose assemblies be proof pressure checked at twice the operating pressure using a proof test stand such as the Aeroquip FT1058 stand.

SOCKETLESS™ Hose[1]



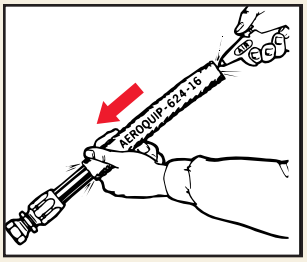
Step 1. Cut hose to required length with a sharp knife. Oil inside of hose and outside of nipple liberally.



Step 2. Push hose on fitting until hose end bottoms underneath protective cap as shown. Clean, proof test to twice operating pressure and inspect all assemblies.

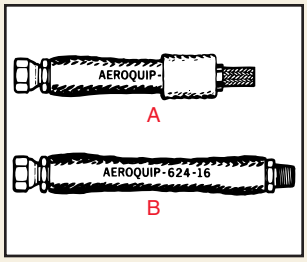
[1]Never use a hose clamp with FBV *SOCKETLESS.™*

Firesleeve



Step 1. Follow the appropriate hose assembly instructions through the assembly of one end fitting. Cut firesleeve to same length as hose. Start firesleeve over cut end of hose.

Note: If applying sleeve over Teflon* or stripped cover assemblies, wrap exposed wire with tape. Grasp sleeve and slip over the hose assembly as illustrated.

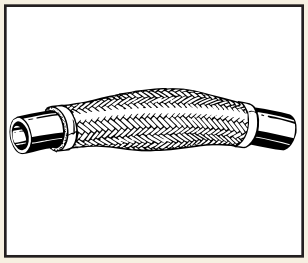


Step 2. Skin sleeve back from cut end of hose enough to allow assembly of second end fitting. (2A)

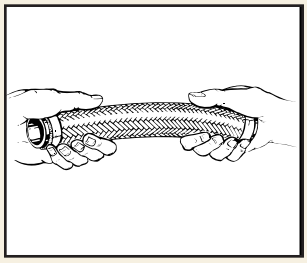
Then center sleeve so that it completely covers both sockets. (2B)

Step 3. Position nylon wire tie or band clamp over sleeve on each end of the hose assembly and draw tight.

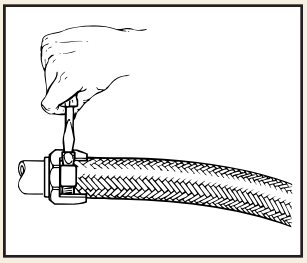
Overbraid



Step 1. Disconnect the radiator hose. Slide overbraid over the radiator hose.



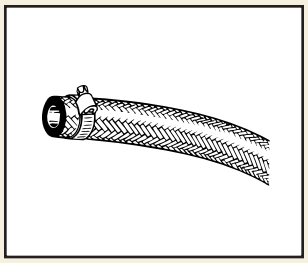
Step 2. Stretch until snug, mark length and cut with tin snips.



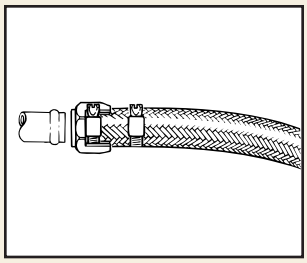
Step 3. Reconnect radiator hose and secure hose and overbraid with clamp or ProClamp clamp.

Bulk or Retail Packaged Parts
FB-prefixed part numbers indicate bulk-packaged products. **FC**-prefixed part numbers indicate carded/clam shelled (retail-packaged) products. Most products in this catalog can be ordered in either package style by changing the prefix accordingly.

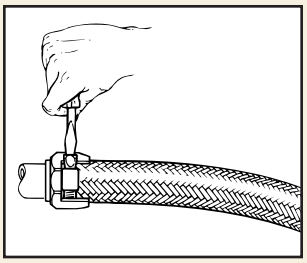
Pro Clamp™



Step 1. Slide clamp onto hose.

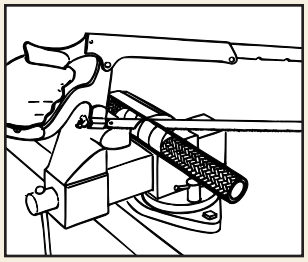


Step 2. Push cap (socket) onto hose until it bottoms. Then slide clamp under cap.

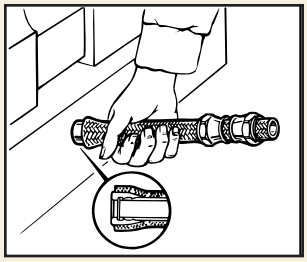


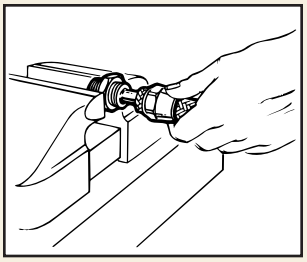
Step 3. Push assembly onto beaded tube. Position clamp for appearance. Tighten with a screwdriver.

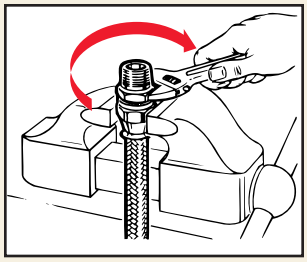
Teflon* Racing Hose



Step 1. Cut hose squa
to







*Teflon is a DuPont trademark.