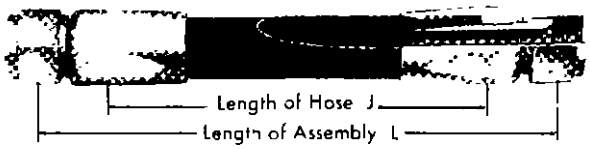
ASSEMBLY INSTRUCTIONS

Medium and Low pressure hose assemblies

350, 360, 390A (MS28741) / 359 (AN6270) / 617000 / 371

Skydrol hose assembly
Follow additional steps or precautions printed in red

To make hose assembly of length "L", cut hose to length "J" Obtain "J" length by subtracting proper fitting allowances See page 95



Step 1 Cut hose squarely to length Use hose cut-off machine or fine tooth hacksaw Do not remove cover

Skydrol hose assemblies
Clean all fitting parts using Trichloroethylene

step 2 Place socket ı" vise Do not overtighten vise on thin-walled sockets of lightweight fittings Screw hose into socket until it bottoms Back off ¼ turn

step 3 Tighten nipple and nut on assembly mandrel An AN815 adapter* may be used with 359 and 617 hose assemblies

Step 4 Lubricate inside of hose and nipple threads liberally Use lubricating oil, petrolatum or light grease

Skydrol hose assemblies
Use only liquid vegetable soap or castor oil

Step 5 Screw nipple into socket and hose using wrench on assembly tool hex Nut must swivel freely when assembly tool is removed Maximum allowable gap is 1/16 inch On size 32 up, screw ı" until turning becomes difficult, back out nipple, relubricate and reassemble

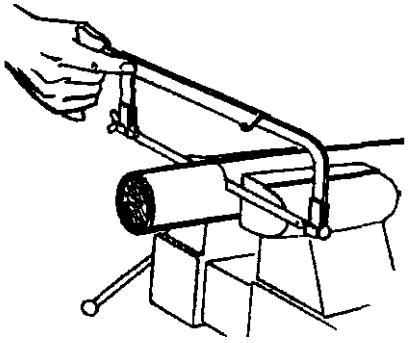
Additional steps for sizes 40 and 48 Hose

Grind end of hose square and smooth after cut off Flare hose end outward with pliers Flare at ½ inch intervals with a ½ inch bite Chamfer hose I D at 30" angle using sharp knife Oil hose 0 D lightly to facilitate attaching socket Use heavy oil (SAE 40) or light grease when inserting nipple

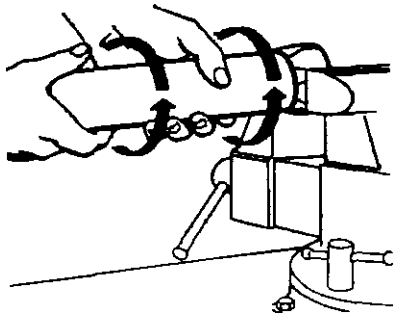
Clean. inspect and proof test See page 102

*Repeated use of AN815 adapters should be avoided
Use of proper Aeroquip assembly tool is highly recommended

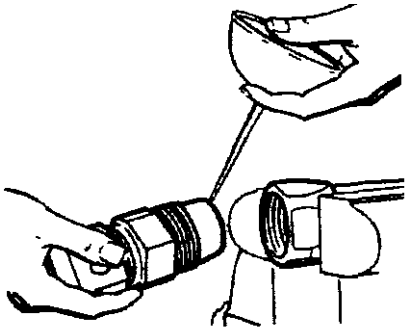
step 1



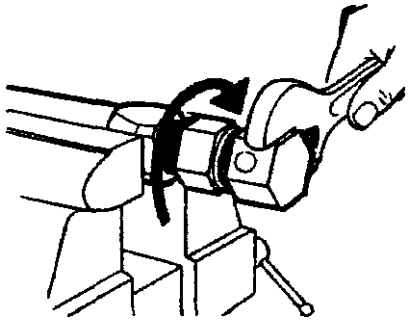
step 2



step 4



step 5



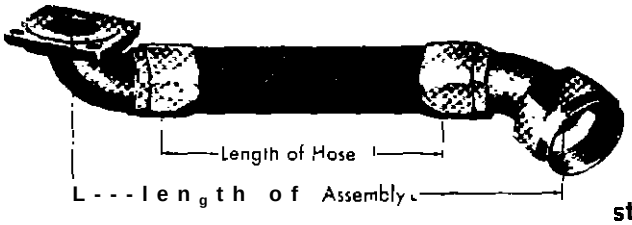
ASSEMBLY INSTRUCTIONS

Elbow hose assemblies

using 303, 302A (MIL-H-8794) / 617 / 602 hose

Skydrol hose assembly
Followadditionalsteps or
precautions printed in red

To make hose assembly of length "L" cut hose to length "J" Obtain "J" length by subtracting proper fitting allowances see page 95



step 1 Cut hose squarely to length Use hose cut-off machine or fine tooth hacksaw Do not remove cover

Skydrol hose assemblies
Clean all fitting parts using Trichloroeteylene

step 2 Place socket in vise Do not overtighten vise on thin-walled sockets of lightweight fittings Screw hose into socket until it bottoms Back-off ¼ turn

step 3 Flange elbow fittings Drop flange over threaded end of nipple Nipple shoulder must fit into counterbore of flange

step 4 Lubricate inside of hose and nipple threads liberally Use lubricating oil, petrolatum or light grease

Skydral hose assemblies
Use only liquid vegetable soap or castor oil

Step 5 Screw nipple into socket and hose using wrench on elbow hex Tighten until hex is snug against socket On size 32 up, screw in until turning becomes difficult, back out nipple, relubricate and reassemble

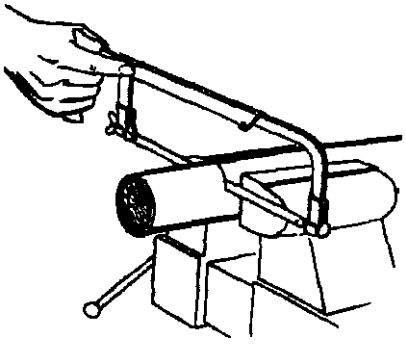
step 6 Adjustments may be necessary to obtain the desired position angle between two elbows In order to minimize backing-off elbows to position, the following procedure should supplement step 5

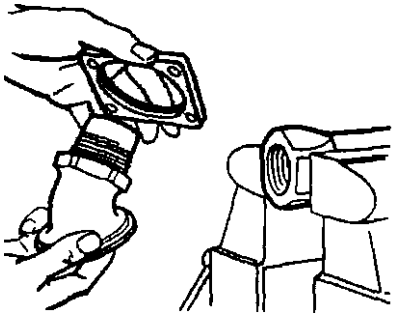
a Tighten both elbows to maximum allowable gap (6c, below). then start to position for relative angle between the elbows

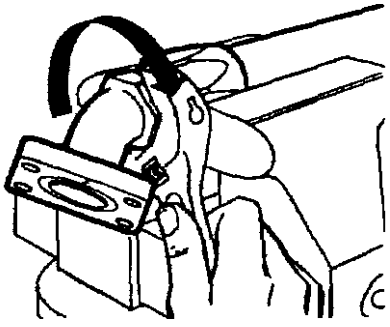
b Finish assembly by adjusting both elbows Backing-off to position should be avoided and in no case should exceed ¼ turn

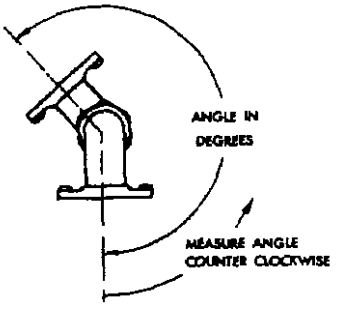
c Maximum allowable gap between hex and socket is 1/32" using 617 hose. 1/16" using 303. 302A hose except on sizes 40 and 48 where 3/32" is allowable

Clean, Inspect and proof test See page 102


step 1


step 3

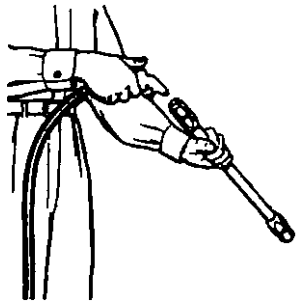

step 5



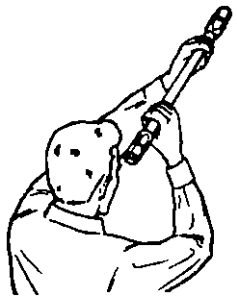
step 6

Testing and storage of flexible hose lines

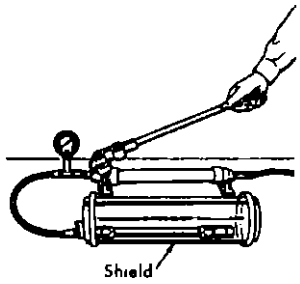
CLEAN



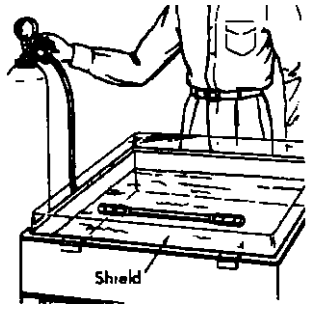
INSPECT



PROOF TEST/ FLUID



PROOF TEST / AIR



CLEAN, INSPECT, PROOF TEST

CLEAN Clean hose after cutting to length Be sure all cutting residue is dislodged After assembly, clean each hose assembly internally using clean, dry compressed air

INSPECT Examine hose assembly internally for cut or bulged inner tube. obstructions and cleanliness Examine Aeroquip h o s e assemblies with "*little gem*" Fittings far hose push out Inspect for proper gap between nut and socket or hex and socket Nuts should swivel freely

PROOF TEST Test hose assemblies in straight, horizontal position and observe for evidence of leakage while maintaining test pressure Several hose assem blies may be tested at one time by connecting them in series

1a LIQUIDTEST MEDIUM tighten cap only after all trapped air has bled from assembly Use a heavy plastic protective cover when applying pressure

1b AIR OR GAS TEST MEDIUM test assemblies under water On hose having a braided outer cover. allow time for entrapped air to escape from braid

2 Use proper proof-test fluid specified for hose

Type	Hose No	Proof Test Fluid
Hydraulic pneumatic fuel, oil and coolants	303 302A 309 601 617	Hydraulic oil (MIL O 5606)* or water
Skydrol	602 611	Skydrol fluid or water
Air or Instrument	306	Dry oil free air or Nitrogen, grade A Type I (MIL N 6011)

*Flush after proof testing using oleum or other neutral spirits

3 Drain and cap

4 Corrosion protection of fittings on hose assemblies

a Brass. corrosion resistant steel, and aluminum alloy fittings require no additional treatment

b Fittings on air or Instrument hose assemblies should not be oiled Dry thoroughly and cap with oil and grease free caps

STORAGE AND HANDLING

1 **BULK HOSE AND HOSE ASSEMBLIES** hose should be stored away from sunlight, heat. ozone. etc To minimize obsolescence or deterioration of hose in storage. follow ' first in, first out" principle in releasing stock for production or shipment

2 Short hose lengths or assemblies may be con veniently stored in closed containers to protect from dust Other hose assemblies should have the ends capped Hose assemblies made up in the field should be marked with the date of assembly before being placed in storage

NOTE All hose assemblies taken from storage should be proof tested prior to installation in aircraft

3 **AGE OF HOSE** age limit of hose generally is established at four years. however. actual anticipated life is greater The difference between anticipated life and four years may be considered a safety factor Hose exceeding established age limits or showing signs of weather checking, cracks. or separation of plies, should not be installed i" aircraft