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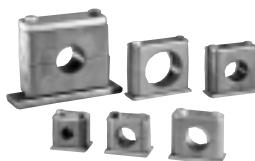
WARNING

THE USER MUST EXERCISE EXTREME CARE WHEN OPERATING ANY AEROQUIP ASSEMBLY EQUIPMENT WITH POWERED MOVING COMPONENTS. SAFETY GLASSES MUST BE WORN AT ALL TIMES WHEN USING ANY AEROQUIP ASSEMBLY EQUIPMENT.

READ AND UNDERSTAND THE OWNERS AND OPERATORS MANUAL BEFORE ATTEMPTING TO OPERATE ANY EQUIPMENT.

EATON AEROQUIP PERSONNEL ARE AVAILABLE TO ANSWER ANY QUESTIONS . . . PLEASE CALL EATON AEROQUIP INC., INDUSTRIAL DIVISION, MAUMEE, OHIO, 419-867-2600.

AEROQUIP ASSEMBLY EQUIPMENT IS DESIGNED TO BE USED ONLY WITH AEROQUIP HOSE AND AEROQUIP HOSE FITTINGS.





This page is part of a complete catalog which contains technical and safety data that must be reviewed when selecting a product.

Protective coils, sleeves & clamps**222005, 222022****Stainless steel internal support coils**

Recommended for vacuum service with most hose.

For use with hose: see pages 352-361.

Part Number	Coil O.D. (inches)
222005-23C	.34
222005-10C	.42
222005-21C	.51
222005-11C	.60
222022-12C	.70
222005-13C	.73
222005-14C	.94
222022-16C	.97
222005-15C	1.19
222022-20C	1.25
222005-17C	1.44
222022-24C	1.50
222005-18C	1.88
222022-32C	1.97
222005-19C	2.44
222022-40C	2.67
222022-48C	3.27
222022-60C	4.28
222022-80C	5.28

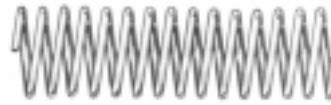
900705**Steel protective coil sleeve**

Recommended for use where hose lines are subjected to excessive abrasion, kinking or accidental damage. Construction: spring steel, rust resistant.

This coil should fit snugly to the hose O.D. expanding the coil I.D. (unwind the coil) may be necessary for proper installation.

For use with hose: see pages 352-361.

Sleeve Dash No.	Sleeve I.D. (inches)
-17S	.44
-1S	.50
-13S	.57
-2S	.63
-3S	.75
-4S	.88
-5S	1.03
-14S	1.13
-6S	1.22
-7S	1.47
-9S	1.69
-8S	1.91
-15S	2.00
-10S	2.13
-16S	2.44
-11S	2.56
-12S	2.75

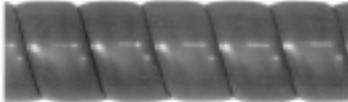
900564**Steel protective coil spring**

Protects hose cover and reinforcement from abrasion and accidental damage. Construction: steel wire, rust resistant.

This coil should fit snugly to the hose O.D. expanding the coil I.D. (unwind the coil) may be necessary for proper installation.

For use with hose: see pages 352-361.

Spring Dash No.	Spring I.D. (inches)
-1S	.61
-12S	.67
-2S	.75
-15S	.81
-14S	.85
-3S	.91
-4S	1.04
-5S	1.18
-6S	1.34
-7S	1.66
-9S	1.87
-8S	2.13
-10S	2.38
-13S	2.75
-11S	2.88

900952**Plastic protective coil sleeve**

Recommended to protect hose from abrasion, this light weight plastic sleeve is unaffected by air, water, oil, gasoline, hydraulic and most other fluids. This coil can also be used for group bundling of hose lines. Temperature range of 0°F to +180°F.

For use with hose: see pages 352-361.

Sleeve Dash No.	Sleeve I.D. (inches)
-4	.25
-6	.38
-8	.50
-10	.63
-12	.75
-16	1.00
-22	1.38
-30	1.88

624 Firesleeve



Firesleeve will protect hose from direct flame. Firesleeve is constructed of a uniform single layer of braided fiberglass tubing impregnated with flame resistant silicone rubber. Temperature range of -65°F to +500°F.

For use with hose: see pages 352-361.

Part Number	I.D. (inches)	Clamp Number (2 required)
624-5	.31	FF9217-0622S
624-7	.44	FF9217-0622S
624-8	.50	FF9217-0622S
624-9	.56	FF9217-0622S
624-10	.62	FF9217-0622S
624-11	.69	FF9217-0622S
624-12	.75	FF9217-0622S
624-13	.81	FF9217-0622S
624-14	.88	FF9217-0622S
624-16	1.00	FF9217-0622S
624-18	1.12	FF9217-0622S
624-20	1.25	FF9217-0648S
624-22	1.38	FF9217-0648S
624-24	1.50	FF9217-0648S
624-26	1.62	FF9217-0648S
624-28	1.75	FF9217-0648S
624-30	1.88	FF9217-0648S
624-32	2.00	FF9217-0648S
624-38	2.38	FF9217-0648S
624-42	2.62	FF9217-0648S
624-46	2.88	FF9217-0664C
624-50	3.12	FF9217-0664C
624-54	3.38	FF9217-0664C
624-60	3.75	FF9217-0664C

FF9217 Firesleeve clamp

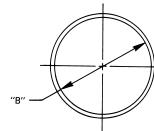


Recommended for attaching 624 Firesleeve to hose lines.

Clamp numbers: **FF9217-0622S**, **FF9217-0648S**; $\frac{3}{8}$ inch wide, **FF9217-0664C**; $\frac{1}{2}$ inch wide.

For use with hose: see pages 352-361.

FC425 Nylon abrasion sleeve Meets MSHA requirements



Nylon sleeve protects hose from abrasion and allows bundling of hose lines.

For use with hose: see pages 352-361.

Part Number	Nominal Sleeve I.D.* "B" (inches)
FC425-12	.71
FC425-15	.92
FC425-16	1.00
FC425-18	1.13
FC425-20	1.25
FC425-24	1.59
FC425-28	1.75
FC425-32	2.07
FC425-38	2.38
FC425-40	2.54
FC425-46	2.86
FC425-54	3.34
FC425-59	3.66

*The maximum O.D. of hose fittings must be allowed for if fittings are to be covered.



Hose Cleaning System

The Jetcleaner™ hose cleaning system offers a revolutionary solution for the internal cleaning of bulk hose and finished hose assemblies. Using a low pressure air gun, the Jetcleaner™ system routes a foam projectile through the hose to thoroughly remove debris remaining from cutting, skiving and assembly operations. Available in kit form or as individual components, the Jetcleaner™ hose cleaning system is the system of choice for hose assembly professionals.

Hose Kit (P/N FT1355-01)

Includes:

Jetcleaner™ pistol, Hose nozzles, 1/4" through 2" ID, Adapter ring, Bench stand, Aluminum case, Quick disconnect coupling

Note: Hose projectiles (P/N FT1355-3-size) not included in kit.

Also available individually:

Jetcleaner™ pistol – FT1355-1-01

Hose nozzles – FT1355-2-size

Hose projectiles – FT1355-3-size

Coupling nozzles – FT1355-4-size

Coupling projectiles – FT1355-5-size

Adapter ring – FT1355-10-01

Carrying case – FT1355-11-02

Bench stand – FT1355-12-01

900729
Support clamp



These light weight vinyl-coated steel support clamps are designed to support hose where long runs are necessary.

This clamp not only furnishes a cleaner installation, but prevents damage, exposure and chafing.

The lining will withstand high ambient temperatures.

Bolt hole dia: Clamp dash no. -01 thru -8, -18 thru -23 is .406; -9 thru -17, -24 thru -31 is .531.

For use with hose: see pages 352-361.

Clamp Dash No.	Clamp I.D. (inches) Closed
-18	.25
-19	.38
-01	.44
-1	.50
-2	.56
-21	.63
-3	.69
-4	.75
-5	.81
-6	.94
-23	1.00
-8	1.06
-9	1.13
-27	1.19
-24	1.25
-25	1.31
-10	1.50
-11	1.56
-12	1.75
-28	1.81
-13	2.00
-29	2.06
-14	2.25
-30	2.50
-31	2.63
-15	2.75
-16	2.88
-17	3.56



FF90311

**Heavy Duty Hose
Support Clamps**

These heavy duty weld-based clamps are designed to securely hold hose in applications subject to impulsive, flexing and vibrating conditions. The clamps help prevent abrasion and extend hose life through proper routing. Clamps are rated to ambient temperature of +250°F. See pages 352-361 for detailed clamp to hose part number reference.

Clamp P/N	Inside Diameter (mm)	Inside Diameter (inch)
FF90311-127	12.70	0.50
FF90311-137	13.70	0.54
FF90311-150	15.00	0.59
FF90311-160	16.00	0.63
FF90311-171	17.10	0.67
FF90311-174	17.40	0.69
FF90311-190	19.00	0.75
FF90311-205	20.50	0.81
FF90311-222	22.20	0.87
FF90311-239	23.90	0.94
FF90311-254	25.40	1.00
FF90311-266	26.60	1.05
FF90311-280	28.00	1.10
FF90311-300	30.00	1.18
FF90311-320	32.00	1.26
FF90311-334	33.40	1.31
FF90311-357	35.70	1.41
FF90311-381	38.10	1.50
FF90311-400	40.00	1.57
FF90311-422	42.20	1.66
FF90311-445	44.50	1.75
FF90311-483	48.30	1.90
FF90311-508	50.80	2.00
FF90311-572	57.20	2.25
FF90311-635	63.50	2.50
FF90311-700	70.00	2.76



FF90308
Hose Insertion Gages

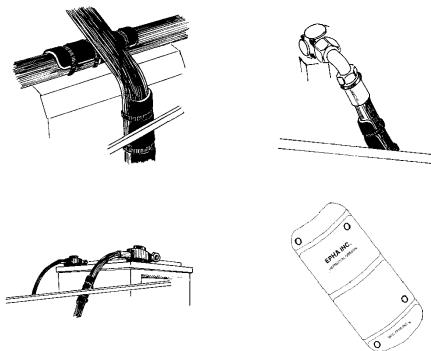
Improve hose assembly reliability with these easy to use aluminum gages that are designed to ensure proper fitting depth during pre-assembly.

Simply bottom the hose in the appropriately marked cavity and scribe a mark on the hose flush with the top surface of the gage. Insert the fitting until the back of the socket is aligned with scribe line.

Part Number	Usage
FF90308-01	For use with all hoses that mate with -4 through -16 TTC and TTC12 fittings
FF90308-02	For use with all hoses that mate with -20 through -32 TTC and TTC 12 fittings
FF90308-03	For use with all hoses that mate with -12, -16, -20 Spiral TTC fittings

For use with all hoses that mate with TTC, TTC12 and Global Spiral TTC™ fittings

EPHA® Hose Protectors



Market Applications:

- Farming
- Trucking
- Construction
- Public Transportation
- Waste Management
- Industrial
- Mining
- Aviation Support
- Road Maintenance
- Original Equip. Manuf.

Abrasion Protection For:

- | | |
|---|---|
| <ul style="list-style-type: none"> ■ Hydraulic Hoses ■ Wiring Harness ■ Fuel Lines ■ Radiator Hoses | <ul style="list-style-type: none"> ■ Battery Cables ■ Brake Systems ■ Air Lines ■ Oil Lines |
|---|---|

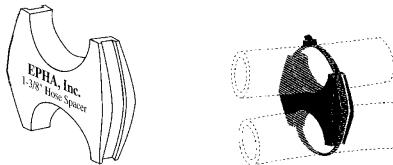
Part Number	Description
HP4*	4" Hose Protector Case of 50
HP6*	6" Hose Protector Case of 50
HP8*	8" Hose Protector Case of 50
HPM*	Mixed Hose Protectors Case of 60

*Hose protectors available in black, orange or yellow.

Features:

- Extremely high wear factor
- Formulated to resist solvents, oils, grease, gasoline, etc.
- 3 grooves protect cable ties and prevent slipping
- Operating temperature range is -40° to 430°F.
- Exceptionally cost effective
- Easy installation in minutes – no need to remove hose
- Packed in easy to assemble, colorful, counter display box
- Available in 3 sizes – 4", 6" and 8" – cable ties included

EPHA® Hose Spacers



Features:

- Prevents hose abrasion at points of contact
- Helps keep hoses organized
- Prevents damage from unrestrained hoses
- Easy to install
- Available in 4 sizes – 3/4", 1", 1 1/8", 1 3/8"
- Packed in colorful counter display boxes of 48 – cable ties included
- Also available in mixed boxes of 48 (12 of each size) or refill bags of 12

EPHA® Hose Looms



Part Number	Description
HLM-48	Case of 48 mixed Hose Looms

Features:

- Prevents hose abrasion at points of contact
- Keeps multiple hoses organized
- Simplifies hose routing
- Prevents damage from unrestrained hoses
- Easy to install
- Available in 4 sizes – 3/4", 1", 1 1/8", 1 3/8"
- Packed in colorful counter display boxes of 48
- Also available in mixed boxes of 48 (12 of each size) or refill bags of 12

ACCESSORIES TO HOSE CHART

ACCESORIES

Part Number	Steel Prot. Coil Spring* 900564 (dash size)	Plastic Coil Sleeve 900952 (dash size)	Steel Prot. Coil Sleeve* 900705 (dash size)	Support Clamp 900729 (dash size)	Internal Support Coil	Nylon Sleeve* FC425 (dash size)	Firesleeve* 624 (dash size)	Firesleeve Clamp FF9217 (dash size)	Heavy Duty Support Clamp FF9031 (dash size)
302A16	-6S	-16	-6S	-27	222005-14C	-24	-24	-0648S	-320
302A20	-7S	-22	-7S	-10	222005-15C	-28	-30	-0648S	-381
302A24	-9S	-22	-9S	-12	222005-17C	-32	-32	-0648S	-445
302A32	-10S	-30	-10S	-14	222005-18C	-38	-38	-0648S	-572
303-4	-1S	-6	-1S	-1		-12	-11	-0622S	-127
303-5	-12S	-8	-13S	-2		-12	-12	-0622S	-150
303-6	-2S	-10	-2S	-21		-16	-14	-0622S	-174
303-8	-14S	-12	-3S	-4	222005-10C	-16	-16	-0622S	-190
303-10	-4S	-12	-4S	-6	222005-21C	-20	-18	-0630S	-239
303-12	-5S	-16	-5S	-8	222005-13C	-20	-20	-0630S	-280
1503-4	-1S	-6	-1S	-1		-12	-11	-0622S	-137
1503-5	-12S	-8	-13S	-2		-12	-12	-0622S	
1503-6	-2S	-10	-2S	-21		-16	-14	-0622S	-174
1503-8	-14S	-12	-3S	-4	222005-10C	-16	-16	-0622S	-190
1503-10	-4S	-12	-4S	-6	222005-21C	-20	-18	-0630S	-239
1503-12	-5S	-16	-5S	-8	222005-13C	-20	-20	-0630S	-280
1503-16	-6S	-16	-6S	-27	222005-14C	-24	-24	-0648S	-320
1503-20	-7S	-22	-7S	-10	222005-15C	-28	-30	-0648S	-381
1503-24	-9S	-22	-9S	-12	222005-17C	-32	-32	-0648S	-445
1503-32	-10S	-30	-10S	-14	222005-18C	-38	-38	-0648S	-572
1503-40			-12S	-16	222005-19C				
1529-4	-2S	-10	-2S	-3		-16	-14	-0622S	-174
1529-6	-3S	-12	-3S	-5		-16	-16	-0630S	-222
1529-8	-4S	-12	-4S	-6		-20	-18	-0630S	-239
1529-10	-5S	-16	-5S	-8		-20	-20	-0630S	-280
1529-12	-6S	-16	-6S	-24		-24	-26	-0648S	-320
1529-16	-7S	-22	-7S	-11		-28	-30	-0648S	-400
1529-20	-8S	-30	-8S	-13		-38	-38	-0648S	-508
1529-24	-10S	-30	-10S	-14		-40	-42	-0648S	-572
1529-32	-11S	-30	-11S	-15		-54	-46	-0664C	-700
1531-10	-4S	-12	-4S	-6		-20	-16	-0622S	-239
1531-12	-5S	-16	-5S	-8		-20	-20	-0630S	-280
1531-16	-7S	-16	-6S	-25		-24	-24	-0630S	-357
1531-20	-7S	-22	-7S	-10		-28	-30	-0648S	-422
1531A-24	-6S	-16	-5S	-9		-24	-32	-0648S	-483
1540-4	-1S	-6	-1S	-1		-12	-11	-0622S	-127
1540-6	-2S	-10	-3S	-21		-16	-14	-0622S	-174
1540-8	-14S	-12	-2S	-4	222005-10C	-16	-16	-0622S	-190
1540-10	-4S	-12	-4S	-5	222005-21C	-20	-18	-0630S	-239
1540-12	-5S	-16	-5S	-8	222005-13C	-20	-20	-0630S	-266
1540-16	-6S	-16	-14S	-27	222005-14C	-24	-24	-0648S	-320
1540-20	-7S	-22	-7S	-10	222005-15C	-28	-30	-0648S	-381
1540-24	-9S	-22	-9S	-12	222005-17C	-32	-32	-0648S	-445
2550-6	-14S	-10	-3S	-4		-16	-13	-0622S	-174
2554-6	-14S	-10	-2S	-4		-16	-13	-0622S	-174
2555-6	-14S	-10	-2S	-4		-16	-13	-0622S	-190
2556-4	-1S	-6	-1S	-1		-12	-9	-0622S	-127
2556-6	-12S	-8	-13S	-21		-16	-11	-0622S	-160
2556-8	-14S	-10	-3S	-4		-16	-13	-0622S	-190
2556-10	-4S	-12	-4S	-5		-16	-16	-0622S	-222
2556-12	-5S	-16	-5S	-23		-20	-18	-0630S	-266
2565-4	-1S	-6	-1S	-1		-12	-9	-0622S	-127
2565-6	-12S	-8	-13S	-21		-16	-11	-0622S	-160
2565-8	-14S	-10	-3S	-4		-16	-13	-0622S	-205
2565-10	-4S	-12	-4S	-6		-16	-16	-0622S	-239
2565-12	-5S	-16	-5S	-8		-20	-18	-0630S	-280
2570-6	-14S	-10	-3S	-4		-16	-13	-0622S	-174
2570-8	-4S	-12	-4S	-6	222005-11C	-16	-18	-0622S	-190

*Sizes indicated are based on Hose O.D. only. If sleeve is to be placed over fittings, a larger sleeve size may be required, depending on type of fitting used.

This page is part of a complete catalog which contains technical and safety data that must be reviewed when selecting a product.

Part Number	Steel Prot. Coil Spring* 900564 (dash size)	Plastic Coil Sleeve 900952 (dash size)	Steel Prot. Coil Sleeve* 900705 (dash size)	Support Clamp 900729 (dash size)	Internal Support Coil	Nylon Sleeve* FC425 (dash size)	Firesleeve* 624 (dash size)	Firesleeve Clamp FF9217 (dash size)	Heavy Duty Support Clamp FF9031 (dash size)
2570-10	-5S	-16	-5S	-8	222005-13C	-20	-20	-0648S	-239
2575-4	-1S	-6	-1S	-1		-12	-9	-0622S	-127
2575-6	-12S	-8	-13S	-21		-16	-11	-0622S	-160
2575-8	-14S	-10	-3S	-4		-16	-13	-0622S	-190
2575-10	-4S	-12	-4S	-6		-20	-16	-0622S	-222
2575-12	-5S	-16	-5S	-23		-20	-18	-0630S	-266
2580-4	-1S	-6	-1S	-1		-12	-11	-0622S	-127
2580-5	-12S	-8	-13S	-2		-12	-12	-0622S	-150
2580-6	-2S	-10	-2S	-21		-16	-14	-0622S	-174
2580-8	-14S	-12	-3S	-4	222005-10C	-16	-16	-0622S	-190
2580-10	-4S	-12	-4S	-6	222005-21C	-20	-18	-0630S	-239
2580-12	-5S	-16	-5S	-8	222005-13C	-20	-20	-0630S	-280
2580-16	-6S	-16	-6S	-27	222005-14C	-24	-24	-0648S	-320
2580-20	-7S	-22	-7S	-10	222005-15C	-28	-28	-0648S	-381
2580-24	-9S	-22	-9S	-12	222005-17C	-32	-32	-0648S	-445
2580-32	-10S	-30	-10S	-14	222005-18C	-40	-42	-0648S	-572
2583-4	-1S	-8	-1S	-2		-12	-11	-0622S	-150
2583-6	-14S	-10	-3S	-4		-16	-16	-0622S	-190
2583-8	-4S	-12	-4S	-6		-20	-20	-0648S	-239
2583-12	-6S	-16	-14S	-24		-24	-24	-0648S	-320
2583-16	-7S	-22	-7S	-10		-28	-28	-0648S	-381
2583-20	-8S	-22	-9S	-12		-32	-32	-0648S	-445
2651-4	-1S	-6	-1S	-1		-12	-11	-0622S	-137
2651-5	-12S	-8	-13S	-2		-12	-12	-0622S	
2651-6	-2S	-10	-2S	-21		-16	-14	-0622S	-174
2651-8	-14S	-12	-3S	-4	222005-10C	-16	-16	-0622S	-190
2651-10	-4S	-12	-4S	-6	222005-21C	-20	-18	-0630S	-239
2651-12	-5S	-16	-5S	-8	222005-13C	-20	-20	-0630S	-280
2651-16	-6S	-16	-6S	-27	222005-14C	-24	-24	-0648S	-320
2651-20	-7S	-22	-7S	-10	222005-15C	-28	-30	-0648S	-381
2651-24	-9S	-22	-9S	-12	222005-17C	-32	-32	-0648S	-445
2651-32	-10S	-30	-10S	-14	222005-18C	-38	-42	-0648S	-572
2651-40			-12S	-16	222005-19C	-54	-50	-0664C	
2661-12	-6S	-16	-14S	-24		-24	-24	-0630S	-320
2661-16	-7S	-22	-7S	-10		-28	-28	-0648S	-381
2661-20	-8S	-22	-9S	-12		-32	-32	-0648S	-445
2661-24	-10S	-30	-15S	-29		-38	-38	-0648S	-508
2661-32	-13S		-16S	-30		-46	-46	-0664C	-635
2661-40						-54	-54	-0664C	
2661-48							-60		
2661-64									
2681-3	-1S	-6	-1S	-1		-12	-11	-0622S	
2681-4	-12S	-8	-13S	-21		-16	-12	-0622S	-160
2681-5	-2S	-8	-2S	-3		-16	-14	-0630S	
2681-6	-14S	-10	-3S	-4		-16	-18	-0630S	-205
2681-8	-4S	-12	-4S	-5		-20	-20	-0630S	-222
2681-10	-5S	-12	-5S	-23		-20	-20	-0630S	-266
2681-12	-6S	-16	-14S	-27	222005-14C	-24	-22	-0648S	-300
2681-16	-7S	-22	-7S	-10	222005-15C	-28	-28	-0648S	-381
2681-20	-8S	-22	-9S	-28	222005-17C	-32	-38	-0648S	-445
2681-24	-10S	-30	-15S	-29	222005-18C	-38	-38	-0648S	-508
2681-32	-13S	-30	-11S	-31	222005-19C	-46	-46	-0664C	-635
2766-4	-2S	-8	-2S	-3		-16	-14	-0622S	-174
2766-6	-3S	-12	-3S	-5		-16	-16	-0630S	-222
2766-8	-4S	-12	-4S	-6		-18	-20	-0630S	-239
2766-12	-6S	-16	-6S	-24		-26	-24	-0648S	-320
2766-16	-7S	-22	-7S	-11		-30	-28	-0648S	-400
2766-20	-8S	-30	-8S	-13		-38	-38	-0648S	-508

*Sizes indicated are based on Hose O.D. only. If sleeve is to be placed over fittings, a larger sleeve size may be required, depending on type of fitting used.

ACCESSORIES TO HOSE CHART

ACCESORIES

Part Number	Steel Prot. Coil Spring* 900564 (dash size)	Plastic Coil Sleeve* 900952 (dash size)	Steel Prot. Coil Sleeve* 900705 (dash size)	Support Clamp 900729 (dash size)	Internal Support Coil	Nylon Sleeve* FC425 (dash size)	Firesleeve* 624 (dash size)	Firesleeve Clamp FF9217 (dash size)	Heavy Duty Support Clamp FF9031 (dash size)
2766-24	-10S	-30	-10S	-14		-42	-42	-0648S	-572
2766-32	-5S	-16	-5S	-8		-20	-20	-0630S	-700
2781-4	-2S	-8	-2S	-3		-16	-14	-0622S	-174
2781-6	-3S	-12	-3S	-5		-16	-16	-0630S	-222
2781-8	-4S	-12	-4S	-6		-20	-18	-0630S	-239
2781-10	-5S	-16	-5S	-8		-20	-20	-0630S	-280
2781-12	-6S	-16	-6S	-24		-24	-26	-0648S	-320
2781-16	-7S	-22	-7S	-11		-28	-30	-0648S	-400
2781-20	-8S	-30	-8S	-13		-38	-38	-0648S	-508
2781-24	-10S	-30	-10S	-14		-40	-42	-0648S	-572
2781-32	-11S	-30	-11S	-15		-54	-46	-0664C	-700
2807-3		-4		-18			-7	-0622S	
2807-4		-4		-18			-8	-0622S	
2807-5		-4		-19			-9	-0622S	
2807-6		-6	-17S	-01	222005-23C		-10	-0622S	
2807-8	-1S	-8	-1S	-1	222005-10C	-12	-12	-0622S	-137
2807-10	-2S	-8	-3S	-21	222005-21C	-16	-14	-0630S	-160
2807-12	-2S	-10	-3S	-4	222005-13C	-16	-16	-0630S	-190
2807-16	-3S	-12	-5S	-23	222005-14C	-20	-20	-0630S	-266
2807-20	-5S	-16	-6S	-24	222005-15C	-24	-24	-0648S	-320
2808-8	-12S	-6	-1S	-2	222005-10C	-12	-16	-0622S	-150
2808-10	-2S	-8	-2S	-3	222005-21C	-16	-18	-0630S	-174
2808-12	-14S	-10	-3S	-5	222005-13C	-16	-20	-0630S	-205
2808-16	-5S	-16	-5S	-8	222005-14C	-20	-26	-0648S	-280
2808-20	-7S	-16	-6S	-25	222005-15C	-24	-32	-0648S	-334
2808-24	-7S	-22	-7S	-11	222005-17C	-28	-38	-0648S	-422
CR170-4	-1S	-6	-1S	-1		-12	-11	-0622S	
CR170-6	-2S	-10	-2S	-21		-16	-14	-0622S	
CR170-8	-14S	-12	-3S	-4	222005-10C	-16	-16	-0622S	
FC136-06	-3S	-12	-3S	-5		-16	-16	-0630S	-205
FC136-08	-4S	-12	-4S	-6		-20	-18	-0630S	-239
FC136-10	-5S	-16	-5S	-8		-20	-20	-0630S	-280
FC136-12	-6S	-16	-6S	-24		-24	-26	-0630S	-300
FC136-16	-7S	-22	-7S	-11		-28	-28	-0630S	-381
FC136-20	-8S	-22	-8S	-28		-32	-38	-0648S	
FC136-24	-10S	-30	-10S	-29		-38	-38	-0648S	
FC136-32	-13S	-30	-11S	-31		-46	-46	-0664C	
FC186-04		-4		-18			-8	-0622S	
FC186-05		-4		-19			-9	-0622S	
FC186-06		-6		-01	222005-23C		-10	-0622S	
FC186-08	-1S	-6	-1S	-1	222005-21C	-12	-12	-0622S	-137
FC186-10	-1S	-8	-13S	-21	222005-21C	-16	-14	-0630S	-160
FC186-12	-2S	-10	-3S	-4	222005-13C	-16	-16	-0603S	-190
FC194-04	-12S	-8	-13S	-21		-16	-12	-0622S	-160
FC194-06	-14S	-10	-3S	-4		-16	-18	-0622S	-205
FC194-08	-4S	-12	-4S	-5		-20	-20	-0630S	-222
FC194-10	-5S	-12	-5S	-23		-20	-20	-0630S	-266
FC194-12	-6S	-16	-14S	-27		-24	-22	-0648S	-300
FC194-16	-7S	-22	-7S	-10		-28	-26	-0648S	-381
FC194-20	-8S	-22	-9S	-28		-32	-32	-0648S	-445
FC195-04	-2S	-8	-2S	-3		-16	-14	-0622S	-174
FC195-06	-3S	-12	-3S	-5		-16	-16	-0622S	-222
FC195-08	-4S	-12	-4S	-6		-20	-18	-0630S	-239
FC195-10	-5S	-16	-5S	-8		-20	-20	-0630S	-280
FC195-12	-6S	-16	-6S	-24		-24	-26	-0630S	-320
FC195-16	-7S	-22	-7S	-11		-28	-30	-0648S	-400
FC195-20	-8S	-30	-8S	-13		-38	-38	-0648S	-500
FC195-24	-10S	-30	-10S	-14		-38	-42	-0648S	-572

*Sizes indicated are based on Hose O.D. only. If sleeve is to be placed over fittings, a larger sleeve size may be required, depending on type of fitting used.

Part Number	Steel Prot. Coil Spring* 900564 (dash size)	Plastic Coil Sleeve 900952 (dash size)	Steel Prot. Coil Sleeve* 900705 (dash size)	Support Clamp 900729 (dash size)	Internal Support Coil	Nylon Sleeve* FC425 (dash size)	Firesleeve* 624 (dash size)	Firesleeve Clamp FF9217 (dash size)	Heavy Duty Support Clamp FF9031 (dash size)	
FC195-32	-11S	-30	-11S	-15		-54	-46	-0648S	-700	
FC211-04	-1S	-6	-1S	-1		-12	-11	-0622S	-137	
FC211-06	-15S	-10	-2S	-3		-16	-14	-0622S	-174	
FC211-08	-3S	-10	-3S	-5		-16	-16	-0630S	-205	
FC211-12	-5S	-16	-5S	-8		-24	-24	-0630S	-280	
FC211-16	-7S	-22	-6S	-25		-24	-24	-0648S	-357	
FC212-04	-12S	-8	-13S	-2		-12	-12	-0622S	-150	
FC212-06	-14S	-10	-2S	-4		-16	-14	-0630S	-190	
FC212-08	-3S	-12	-4S	-5		-16	-18	-0630S	-222	
FC212-12	-6S	-16	-14S	-9		-20	-22	-0648S	-300	
FC212-16	-7S	-22	-7S	-10		-24	-26	-0648S	-381	
FC212-20	-8S	-22	-8S	-28		-32	-32	-0648S	-483	
FC212-24	-10S	-30	-10S	-13	222005-18C	-38	-38	-0648S		
FC212-32	-13S	-30	-12S	-30	222005-19C	-46	-46	-0664C	-635	
FC234-05	-1S	-10	-2S	-21		-12	-11	-0622S	-150	
FC234-06	-2S	-12	-3S	-4		-12	-12	-0622S	-174	
FC234-08	-3S	-12	-4S	-4	222005-10C	-16	-12	-0622S	-190	
FC234-10	-4S	-16	-5S	-23	222005-21C	-16	-13	-0622S	-239	
FC234-12	-5S	-16	-14S	-9	222005-13C	-20	-16	-0630S	-280	
FC234-16	-6S	-22	-7S	-24	222005-14C	-20	-20	-0630S	-320	
FC252-08									-205	
FC252-10									-239	
FC252-12									-266	
FC252-16									-334	
FC 254-08	-4S	-12	-4S	-6		-20	-18	-0630S	-254	
FC254-12	-6S	-16	-6S	-24		-24	-26	-0648S	-320	
FC254-16	-7S	-22	-7S	-10		-28	-30	-0648S	-381	
FC254-20	-8S	-22	-9S	-28		-32	-32	-0648S	-445	
FC254-24	-10S	-30	-10S	-29		-38	-38	-0648S		
FC254-32	-10S	-30	-11S	-31		-54	-46	-0664C	-700	
FC273-12	-6S	-16	-6S	-24		-24	-26	-0648S	-320	
FC273-16	-7S	-22	-7S	-10		-28	-30	-0648S	-381	
FC273-20	-8S	-30	-8S	-13		-38	-38	-0648S	-508	
FC273-24	-10S	-30	-10S	-14		-40	-42	-0664C	-572	
FC273-32	-11S			-16		-54	-46	-0664C	-700	
FC300-04	-1S	-6	-1S	-1		-12	-11	-0622S	-137	
FC300-05	-12S	-8	-13S	-2		-12	-12	-0622S		
FC300-06	-2S	-10	-2S	-21		-16	-14	-0622S	-174	
FC300-08	-14S	-12	-3S	-4	222005-10C	-16	-16	-0622S	-190	
FC300-10	-4S	-12	-4S	-6	222005-21C	-20	-18	-0630S	-239	
FC300-12	-5S	-16	-5S	-8	222005-13C	-20	-20	-0630S	-280	
FC300-16	-6S	-16	-6S	-27	222005-14C	-24	-24	-0648S	-320	
FC300-20	-7S	-22	-7S	-10	222005-15C	-28	-30	-0648S	-381	
FC300-24	-9S	-22	-9S	-12	222005-17C	-32	-32	-0648S	-445	
FC300-32	-10S	-30	-10S	-14	222005-18C	-38	-38	-0648S	-572	
FC300-40				-12S	-16	222005-19C				
FC310-04	-12S	-6	-1S	-2		-12	-12	-0622S	-137	
FC310-06	-14S	-10	-2S	-4		-12	-16	-0622S	-174	
FC310-08	-3S	-12	-3S	-5		-16	-16	-0630S	-205	
FC310-10	-4S	-12	-4S	-6		-20	-18	-0630S	-239	
FC310-12	-5S	-16	-5S	-8		-20	-22	-0630S	-280	
FC310-16	-7S	-16	-6S	-25		-24	-24	-0648S	-357	
FC310-20	-9S	-30	-8S	-12		-32	-30	-0648S	-422	
FC318-12	-6S	-16	-14S	-24		-24	-24	-0630S	-320	
FC318-16	-7S	-22	-7S	-10		-28	-28	-0648S	-381	
FC318-20	-8S	-22	-9S	-12		-32	-32	-0648S	-445	
FC318-24	-10S	-30	-15S	-29		-38	-38	-0648S	-508	
FC318-32	-13S			-16S	-30		-46	-42	-0664C	-635

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ACCESSORIES TO HOSE CHART

ACCESORIES

Part Number	Steel Prot. Coil Spring* 900564 (dash size)	Plastic Coil Sleeve 900952 (dash size)	Steel Prot. Coil Sleeve* 900705 (dash size)	Support Clamp 900729 (dash size)	Internal Support Coil	Nylon Sleeve* FC425 (dash size)	Firesleeve* 624 (dash size)	Firesleeve Clamp FF9217 (dash size)	Heavy Duty Support Clamp FF9031 (dash size)
FC318-40						-54	-54	-0664C	
FC318-48							-60		
FC318-64									
FC321-04	-1S	-6	-1S	-1		-12	-11	-0622S	-137
FC321-05	-12S	-8	-13S	-2		-12	-12	-0622S	-150
FC321-06	-2S	-10	-2S	-21		-16	-14	-0622S	-174
FC321-08	-14S	-12	-3S	-4	222005-10C	-16	-16	-0622S	-190
FC321-10	-4S	-12	-4S	-5	222005-11C	-20	-18	-0630S	-239
FC321-12	-5S	-16	-5S	-8	222005-13C	-20	-20	-0630S	-280
FC321-16	-6S	-16	-6S	-27	222005-14C	-24	-22	-0630S	-320
FC323-12	-5S	-16	-14S	-27		-24	-24	-0643S	-300
FC323-16	-6S	-22	-7S	-25		-28	-28	-0643S	-381
FC323-20	-8S	-30	-15S	-28		-32	-32	-0648S	
FC323-24	-10S	-30	-10S	-29		-38	-38	-0648S	
FC323-32	-13S	-30	-11S	-31		-46	-46	-0664C	
FC324-08	-4S	-12	-4S	-6		-20	-18	-0622S	-239
FC324-12	-6S	-16	-14S	-27		-24	-26	-0648S	-300
FC324-16	-7S	-22	-7S	-10		-28	-30	-0648S	-381
FC325-12	-6S	-16	-6S	-24		-24	-26	-0648S	-320
FC325-16	-7S	-22	-7S	-10		-28	-30	-0648S	-381
FC332-04	-1S	-6	-1S			-12	-9	-0622S	-127
FC332-06	-12S	-8	-13S	-21		-16	-11	-0622S	-160
FC332-08	-14S	-10	-3S	-4		-16	-13	-0622S	-190
FC332-10	-3S	-12	-4S	-5		-20	-16	-0622S	-222
FC332-12	-5S	-12	-5S	-23		-20	-18	-0630S	-266
FC350-04	-1S	-6	-1S	-1		-12	-11	-0622S	-127
FC350-05	-12S	-8	-13S	-2		-12	-12	-0622S	-150
FC350-06	-2S	-10	-2S	-21		-16	-14	-0622S	-174
FC350-08	-14S	-12	-3S	-4	222005-10C	-16	-16	-0622S	-190
FC350-10	-4S	-12	-4S	-6	222005-21C	-20	-18	-0630S	-239
FC350-12	-16S	-5	-5S	-8	222005-13C	-20	-20	-0630S	-280
FC350-16	-6S	-16	-6S	-27	222005-14C	-24	-24	-0648S	-320
FC350-20	-7S	-22	-7S	-10	222005-15C	-28	-30	-0648S	-381
FC350-24	-9S	-22	-9S	-12	222005-17C	-32	-32	-0648S	-445
FC352-08									-239
FC352-10									-266
FC352-12									-300
FC352-14									-334
FC352-16									-357
FC352-18									-400
FC352-20									-422
FC352-22									-445
FC352-24									-508
FC352-26									-508
FC352-28									-572
FC352-32									-635
FC352-36									-700
FC352-38									
FC352-40									
FC352-44									
FC352-48									
FC352-56									
FC352-64									
FC355-04	-1S	-6	-1S	-1		-12	-11	-0622S	-127
FC355-05	-1S	-6	-2S	-1		-12	-11	-0622S	-150
FC355-06	-12S	-8	-1S	-2		-12	-12	-0622S	-174
FC355-08	-2S	-10	-13S	-3		-16	-12	-0622S	-190
FC355-10	-3S	-12	-3S	-5	222005-10C	-16	-13	-0622S	-239

*Sizes indicated are based on Hose O.D. only. If sleeve is to be placed over fittings, a larger sleeve size may be required, depending on type of fitting used.

Part Number	Steel Prot. Coil Spring* 900564 (dash size)	Plastic Coil Sleeve 900952 (dash size)	Steel Prot. Coil Sleeve* 900705 (dash size)	Support Clamp 900729 (dash size)	Internal Support Coil	Nylon Sleeve* FC425 (dash size)	Firesleeve* 624 (dash size)	Firesleeve Clamp FF9217 (dash size)	Heavy Duty Support Clamp FF9031 (dash size)
FC355-12	-4S	-6	-5S-4S	-6	222005-21C	-20	-16	-0630S	-280
FC355-16	-5S	-16	-6S	-9	222005-13C	-20	-20	-0630S	-320
FC355-20	-6S	-22	-7S	-24	222005-14C	-24	-22	-0648S	-381
FC355-24	-7S	-22	-7S	-10	222005-15C	-28	-30	-0648S	-445
FC355-32	-9S	-22	-9S	-12	222005-17C	-32	-32	-0648S	-572
FC363-08	-15S	-10	-4S	-5		-16	-14	-0622S	-190
FC363-12	-5S	-16	-6S	-8		-20	-20	-0630S	-266
FC363-16	-6S	-16	-7S	-10		-24	-22	-0630S	-320
FC363-20	-7S	-22	-9S	-11		-28	-26	-0648S	-381
FC363-24	-9S	-22	-8S	-2S		-32	-30	-0648S	-445
FC363-32	-10S		-16S	-30		-59	-42	-0648S	-572
FC364-08	-15S	-10	-4S	-5		-16	-14	-0622S	-190
FC364-12	-5S	-16	-6S	-8		-20	-20	-0630S	-266
FC364-16	-6S	-22	-7S	-10		-24	-22	-0630S	-320
FC364-20	-7S	-30	-9S	-11		-28	-26	-0648S	-381
FC364-24	-9S	-30	-8S	-28		-32	-30	-0648S	-445
FC364-32	-10S		-16S	-30		-59	-42	-0648S	-572
FC364-40	-11S	-30	-12S	-16		-54	-50	-0664S	-635
FC364-48									
FC372-02		-4				-12			
FC372-03		-4		-19		-12	-10	-0622S	
FC372-04		-6	-1S	-1		-12	-11	-0622S	-137
FC372-05		-8	-13S	-2		-12	-12	-0622S	-150
FC372-06		-10	-2S	-3		-16	-14	-0622S	-171
FC372-08		-12	-3S	-5		-16	-16	-0622S	-205
FC372-10	-4S	-12	-4S	-6		-20	-18	-0630S	-239
FC372-12		-16	-5S	-8		-20	-20	-0630S	-266
FC372-16	-6S		-6S	-25		-24	-26	-0648S	-334
FC373-02		-4				-12	-11	-0622S	
FC373-03		-4		-19		-12	-10	-0622S	
FC373-04		-6	-1S	-1		-12	-11	-0622S	-137
FC373-05		-8	-13S	-2		-12	-12	-0622S	-150
FC373-06		-10	-2S	-3		-16	-14	-0622S	-171
FC373-08		-12	-3S	-5		-16	-16	-0622S	-205
FC373-12		-16	-5S	-8		-24	-25	-0648S	-266
FC373-16	-6S		-6S	-25		-24	-26	-0648S	-334
FC374-03		-4		-19		-12	-10	-0622S	
FC374-04		-6	-1S	-1		-12	-11	-0622S	-127
FC374-06		-10	-2S	-3		-16	-14	-0622S	-171
FC374-08		-12	-3S	-5		-16	-16	-0622S	-205
FC374-12		-16	-5S	-8		-20	-20	-0630S	-300
FC374-16	-7S	-16	-6S	-25		-24	-24	-0648S	-334
FC375-03		-4		-19		-12	-10	-0622S	
FC375-04		-6	-1S	-1		-12	-11	-0622S	-127
FC375-06		-10	-2S	-3		-16	-14	-0622S	-171
FC375-08		-12	-3S	-5		-16	-16	-0622S	-205
FC375-12		-16	-5S	-8		-20	-20	-0630S	-300
FC375-16	-7S	-16	-6S	-25		-24	-24	-0648S	-334
FC376-03		-6	-1S	-1		-12	-12	-0622S	-127
FC376-04	-1S	-8	-2S	-21		-16	-14	-0622S	-160
FC376-06	-2S	-10	-3S	-4		-16	-16	-0622S	-170
FC377-03		-6	-1S	-1		-12	-12	-0622S	-127
FC377-04	-1S	-8	-2S	-21		-16	-14	-0622S	-160
FC377-06	-2S	-10	-3S	-4		-16	-16	-0622S	-190
FC414-06	-15S	-10	-2S	-3		-16	-14	-0622S	-174
FC465-03		-4		-18			-9	-0622S	
FC465-04		-4		-18			-9	-0622S	
FC465-05		-4		-19			-10	-0622S	

*Sizes indicated are based on Hose O.D. only. If sleeve is to be placed over fittings, a larger sleeve size may be required, depending on type of fitting used.

ACCESSORIES TO HOSE CHART

ACCESORIES

Part Number	Steel Prot. Coil Spring* 900564 (dash size)	Plastic Coil Sleeve* 900952 (dash size)	Steel Prot. Coil Sleeve* 900705 (dash size)	Support Clamp 900729 (dash size)	Internal Support Coil	Nylon Sleeve* FC425 (dash size)	Firesleeve* 624 (dash size)	Firesleeve Clamp FF9217 (dash size)	Heavy Duty Support Clamp FF9031 (dash size)
FC465-06		-6		-01	222005-23C	-12	-11	-0622S	
FC465-08	-1S	-8	-1S	-1	222005-21C	-12	-13	-0622S	-137
FC465-10	-1S	-8	-13S	-21	222005-21C	-16	-14	-0622S	-160
FC465-12	-2S	-10	-3S	-4	222005-13C	-16	-16	-0622S	-190
FC465-16	-3S	-12	-5S	-23	222005-14C	-20	-20	-0648S	-266
FC465-20	-5S	-16	-6S	-24	222005-15C	-24	-24	-0648S	-320
FC466-04	-1S	-6	-1S	-1		-12	-9	-0622S	-127
FC466-06	-12S	-8	-13S	-21		-16	-11	-0622S	-160
FC466-08	-14S	-10	-3S	-4		-16	-13	-0622S	-190
FC466-10	-3S	-12	-4S	-5		-20	-16	-0622S	-222
FC466-12	-5S	-12	-5S	-23		-20	-18	-0630S	-266
FC469-06	-1S	-6	-1S	-1	222005-23C	-12	-12	-0622S	
FC469-08	-1S	-8	-13S	-21	222005-10C	-16	-14	-0622S	
FC469-10	-12S	-10	-2S	-4	222005-21C	-16	-16	-0622S	-150
FC498-04	-1S	-6	-1S	-1		-12	-9	-0622S	-127
FC498-06	-12S	-8	-13S	-21		-16	-11	-0622S	-160
FC498-08	-14S	-10	-3S	-4		-16	-13	-0622S	-190
FC498-10	-4S	-12	-4S	-5		-20	-16	-0622S	-222
FC498-12	-5S	-12	-5S	-23		-20	-18	-0630S	-266
FC505-04	-1S	-6	-1S	-1		-12	-9	-0622S	
FC505-06	-12S	-8	-13S	-2		-12	-12	-0622S	-150
FC505-08	-2S	-10	-2S	-21		-16	-14	-0622S	-174
FC505-10	-14S	-12	-3S	-4		-16	-16	-0622S	
FC505-12	-4S	-12	-4S	-6		-20	-18	-0630S	
FC510-04	-12S	-6	-1S	-2		-12	-12	-0622S	
FC510-06	-14S	-10	-2S	-4		-16	-16	-0622S	-174
FC510-08	-3S	-12	-3S	-5		-16	-16	-0630S	-205
FC510-10	-4S	-12	-4S	-6		-20	-18	-0630S	-239
FC510-12	-5S	-16	-5S	-8		-20	-22	-0630S	-280
FC510-16	-7S	-16	-6S	-25		-24	-24	-0630S	-334
FC510-20	-9S	-30	-8S	-12		-32	-30	-0648S	-422
FC555-12	-5S	-16	-5S	-8		-20	-22	-0630S	-280
FC555-16	-7S	-16	-7S	-25		-24	-24	-0648S	-357
FC555-20	-9S	-22	-9S	-10		-28	-30	-0648S	-422
FC558-10	-4S	-12	-4S	-5	222005-21C	-20	-18	-0630S	-239
FC558-12	-5S	-16	-5S	-8	222005-13C	-20	-20	-0630S	-266
FC558-16	-6S	-16	-14S	-27	222005-14C	-24	-24	-0648S	-320
FC558-20	-7S	-22	-7S	-10	222005-15C	-28	-30	-0648S	-381
FC558-24	-9S	-22	-9S	-12	222005-17C	-32	-32	-0648S	-445
FC563-08	-15S	-12	-3S	-5		-16	-16	-0622S	-205
FC563-12	-5S	-16	-14S	-9		-20	-22	-0648S	-280
FC563-16	-6S	-16	-6S	-2S		-24	-26	-0648S	-334
FC563-20	-7S	-22	-7S	-11		-28	-30	-0648S	
FC563-24	-9S	-22	-9S	-28		-32	-32	-0648S	
FC563-32	-10S	-30	-10S	-14		-40	-42	-0648S	
FC579-04	-2S	-8	-2S	-3		-16	-14	-0622S	-174
FC606-16	-7S	-22	-7S	-10	222005-15C	-28	-30	-0648S	-422
FC606-20	-8S	-30	-8S	-13	222005-17C	-38	-38	-0648S	-508
FC606-24	-10S	-30	-10S	-14	222005-18C	-40	-42	-0648S	-572
FC611-04	-1S	-6	-1S	-1		-12	-11	-0622S	-137
FC611-06	-15S	-10	-2S	-3		-16	-14	-0622S	-174
FC611-08	-3S	-10	-3S	-5		-16	-16	-0630S	-205
FC611-12	-5S	-16	-5S	-8		-24	-24	-0630S	-280
FC611-16	-7S	-22	-6S	-25		-24	-24	-0648S	-357
FC611-20	-9S	-30	-8S	-12		-32	-30	-0648S	-422
FC611-24	-8S	-30	-8S	-13		-38	-38	-0648S	-483
FC611-32	-13S	-30	-12S	-30	222005-19C	-46	-46	-0664C	-635
FC616-06	-3S	-12	-3S	-5		-16	-16	-0630S	-205

*Sizes indicated are based on Hose O.D. only. If sleeve is to be placed over fittings, a larger sleeve size may be required, depending on type of fitting used.

Part Number	Steel Prot. Coil Spring* 900564 (dash size)	Plastic Coil Sleeve* 900952 (dash size)	Steel Prot. Coil Sleeve* 900705 (dash size)	Support Clamp 900729 (dash size)	Internal Support Coil	Nylon Sleeve* FC425 (dash size)	Firesleeve* 624 (dash size)	Firesleeve Clamp FF9217 (dash size)	Heavy Duty Support Clamp FF9031 (dash size)
FC619-12	-6S	-16	-6S	-27		-24	-26	-0648S	-300
FC619-16	-6S	-22	-7S	-25		-28	-28	-0643S	-381
FC619-20	-8S	-22	-9S	-12		-32	-32	-0648S	-445
FC619-24	-10S	-30	-15S	-29		-38	-38	-0648S	-508
FC619-32	-13S		-16S	-30		-46	-46	-0664C	-635
FC636-12	-5S	-16	-14S	-27		-24	-24	0643S	-300
FC636-16	-6S	-22	-7S	-25		-28	-28	-0643S	-381
FC636-20	-8S	-22	-10S	-28	222005-17C	-32	-38	-0648S	
FC636-24	-8S	-30	-10S	-29	222005-18C	-38	-38	-0648S	
FC639-04	-1S	-6	-1S	-1		-12	-11	-0622S	-137
FC639-06	-2S	-10	-2S	-3		-16	-14	-0622S	-174
FC639-08	-15S	-10	-3S	-5		-16	-16	-0622S	-205
FC639-10	-54S	-16	-5S	-6		-20	-20	-0630S	-239
FC639-12	-5S	-16	-6S	-9	222005-14C	-22	-22	-0648S	-280
FC639-16	-7S	-22	-7S	-10	222005-15C	-24	-28	-0648S	-357
FC645-06		-6	-17S	-01	222005-23C		-10	-0622S	
FC647-04	-1S	-6	-1S	-1		-12	-9	-0622S	-127
FC647-06	-12S	-8	-13S	-21		-16	-11	-0622S	-160
FC647-08	-14S	-10	-3S	-4		-16	-13	-0622S	-190
FC647-10	-3S	-12	-4S	-5		-20	-16	-0622S	-222
FC647-12	-5S	-12	-5S	-23		-20	-18	-0630S	-266
FC650-04	-1S	-6	-1S	-1		-12	-11	-0622S	
FC650-06	-2S	-10	-2S	-21		-16	-14	-0622S	-160
FC650-08	-14S	-12	-3S	-4	222005-10C	-16	-16	-0622S	-190
FC650-10		-12	-3S	-5		-16	-16	-0622S	-205
FC650-12	-54S	-16	-5S	-6		-20	-20	-0630S	-254
FC659-06	-3S	-12	-3S	-5		-16	-16	-0630S	-205
FC659-08	-4S	-12	-4S	-6		-20	-18	-0630S	-239
FC659-10	-5S	-16	-5S	-8		-20	-20	-0630S	-280
FC659-12	-6S	-16	-6S	-24		-24	-26	-0630S	-300
FC659-16	-7S	-22	-7S	-11		-28	-28	-0630S	-381
FC659-20	-8S	-22	-8S	-28		-32			
FC665-06	-12S	-8	-13S	-2		-12	-12	-0622S	-150
FC665B04	-1S	-6	-1S	-1		-12	-9	-0622S	
FC665R04	-1S	-6	-1S	-1		-12	-9	-0622S	
FC665Y04	-1S	-6	-1S	-1		-12	-9	-0622S	
FC690-04RL		-6	-1S	-1		-12	-11	-0622S	-137
FC690-06RL		-10	-2S	-3		-16	-14	-0622S	-171
FC690-08RL		-12	-3S	-5		-16	-16	-0622S	-205
FC693-04	-1S	-8	-13S	-2		-12	-12	0622S	
FC693-06	-1S	-10	-2S	-4		-16	-16	-0622S	
FC693-08	-3S	-12	-3S	-5		-18	-18	-0622S	
FC699-04	-12S	-6	-1S	-2		-12	-12	-0622S	
FC699-06	-14S	-10	-2S	-4		-16	-16	-0622S	-174
FC699-08	-3S	-12	-3S	-5		-16	-16	-0630S	-205
FC699-10	-4S	-12	-4S	-6		-20	-18	-0630S	-239
FC699-12	-5S	-16	-5S	-8		-20	-22	-0630S	-280
FC701-12	-6S	-16	-14S	-9		-20	-22	-0648S	
FC701-16	-7S	-22	-6S	-25		-24	-26	-0648S	-357
FC701-20	-8S	-22	-9S	-12		-32	-32	-0648S	-445
FC702-12	-6S	-16	-14S	-27		-24	-26	-0648S	-300
FC702-16	-7S	-22	-6S	-25		-24	-26	-0648S	-357
FC735-16	-7S	-22	-7S	-10	222005-15C	-24	-28	-0648S	-357
FC736-06	-3S	-12	-3S	-5		-16	-16	-0630S	-205
FC736-08	-4S	-12	-4S	-6		-20	-18	-0630S	-239
FC736-10	-5S	-16	-5S	-8		-20	-20	-0630S	-280
FC736-12	-6S	-16	-6S	-24		-24	-26	-0630S	-300
FC736-16	-7S	-22	-7S	-11		-28	-28	-0630S	-381

*Sizes indicated are based on Hose O.D. only. If sleeve is to be placed over fittings, a larger sleeve size may be required, depending on type of fitting used.

ACCESSORIES TO HOSE CHART

ACCESORIES

Part Number	Steel Prot. Coil Spring* 900564 (dash size)	Plastic Coil Sleeve 900952 (dash size)	Steel Prot. Coil Sleeve* 900705 (dash size)	Support Clamp 900729 (dash size)	Internal Support Coil	Nylon Sleeve* FC425 (dash size)	Firesleeve* 624 (dash size)	Firesleeve Clamp FF9217 (dash size)	Heavy Duty Support Clamp FF9031 (dash size)
FC736-20	-8S	-22	-8S	-28		-32	-30	-0648S	
FC765-06	-12S	-8	-13S	-2		-12	-12	-0622S	-150
FC765B04	-1S	-6	-1S	-1		-12	-9	-0622S	
FC765R04	-1S	-6	-1S	-1		-12	-9	-0622S	
FC765Y04	-1S	-6	-1S	-1		-12	-9	-0622S	
FC802-04	-1S	-6	-1S	-1		-12	-11	-0622S	
FC802-06	-2S	-8	-2S	-4		-16	-14	-0622S	
FC802-08	-14S	-10	-3S	-4		-16	-16	-0622S	
FC802-10	-4S	-12	-4S	-5		-20	-18	-0630S	
FC802-12	-4S	-16	-5S	-8		-20	-20	-0648S	
FC802-16	-6S	-16	-14S	-27	222005-14C	-24	-24	-0648S	
GH120-4	-1S	-8	-13S	-2		-12	-12	-0622S	-137
GH120-6	-2S	-10	-2S	-3		-16	-16	-0622S	-171
GH120-8	-14S	-12	-3S	-5		-16	-18	-0622S	-205
GH120-10	-54S	-16	-5S	-6		-20	-20	-0630S	-239
GH120-12	-5S	-16	-6S	-9		-22	-22	-0648S	-280
GH120-16	-7S	-22	-7S	-10		-24	-28	-0648S	-357
GH120-20	-9S	-30	-8S			-32	-30	-0648S	-422
GH120-24	-10S	-30	-15S	-29		-38	-38	-0648S	-508
GH120-32	-13S	-30	-12S	-30		-46	-46	-0664C	-635
GH134-6	-12S	-8	-13S	-2		-12	-12	-0622S	-150
GH134-8	-2S	-10	-2S	-3		-16	-14	-0622S	-174
GH134-10	-14S	-12	-3S	-4		-16	-16	-0622S	
GH194-4	-1S	-6	-1S	-1		-12	-11	-0622S	-137
GH194-6	-2S	-10	-2S	-3		-16	-14	-0622S	-174
GH194-8	-15S	-10	-3S	-5		-16	-16	-0622S	-205
GH194-12	-4S	-12	-4S	-6		-20	-18	-0633S	
GH194-10	-4S	-12	-4S	-6		-20	-18	-0630S	-239
GH194-12	-5S	-16	-5S	-8		-24	-22	-0648S	-280
GH194-16	-6S	-22	-6S	-25		-24	-26	-0648S	-357
GH194-20	-9S	-30	-8S	-1		-32	-30	-0648S	-445
GH195-4	-1S	-8	-13S	-2		-12	-12	-0622S	-150
GH195-6	-1S	-10	-2S	-4		-16	-16	-0622S	-190
GH195-8	-3S	-12	-3S	-5		-18	-18	-0622S	-222
GH195-10	-54S	-16	-5S	-6		-20	-20	-0630S	-266
GH195-12	-5S	-16	-6S	-9		-22	-22	-0648S	-300
GH195-16	-7S	-22	-9S	-10		-28	-28	-0648S	-381
GH195-20	-8S	-30	-10S	-12		-32	-32	-0664C	-483
GH195-24	-10S	-30	-11S	-13		-38	-38	-0648S	
GH195-32	-13S	-30	-12S	-30		-46	-46	-0664C	-635
GH466-20	-8S	-30	-8S	-13		-38	-38	-0648S	-508
GH493-6	-15S	-12	-3S	-5		-16	-16	-0622S	-205
GH493-8	-3S	-12	-4S	-6		-20	-20	-0648S	-239
GH493-10	-4S	-16	-5S	-8		-20	-22	-0648S	-280
GH493-12	-5S	-16	-6S	-27		-24	-24	-0648S	-300
GH493-16	-7S	-22	-7S	-10		-28	-28	-0648S	-381
GH493-20	-8S	-22	-10S	-28		-32	-38	-0648S	
GH493-24	-8S	-30	-10S	-29		-38	-38	-0648S	
GH493-32	-13S	-30	-11S	-31		-46	-46	-0664S	
GH506-12	-6S	-16	-6S	-24		-24	-26	-0648S	-320
GH506-16	-7S	-22	-7S	-10		-28	-30	-0648S	-381
GH506-20	-8S	-22	-9S	-28		-32	-32	-0648S	-445
GH663-4	-1S	-6	-1S	-1		-12	-11	-0622S	-137
GH663-6	-2S	-10	-2S	-3		-16	-14	-0622S	-174
GH663-8	-15S	-10	-3S	-5		-16	-16	-0622S	-205
GH663-12	-5S	-16	-5S	-8		-24	-22	-0648S	-280
GH663-16	-7S	-22	-6S	-25		-24	-26	-0648S	-357
GH663-20	-9S	-30	-8S	-12		-32	-30	-0648S	-422

*Sizes indicated are based on Hose O.D. only. If sleeve is to be placed over fittings, a larger sleeve size may be required, depending on type of fitting used.

This page is part of a complete catalog which contains technical and safety data that must be reviewed when selecting a product.

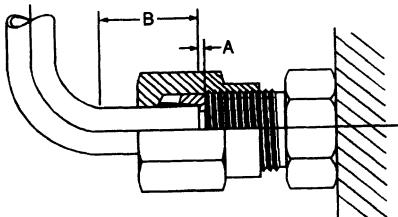
Part Number	Steel Prot. Coil Spring* 900564 (dash size)	Plastic Coil Sleeve 900952 (dash size)	Steel Prot. Coil Sleeve* 900705 (dash size)	Support Clamp 900729 (dash size)	Internal Support Coil	Nylon Sleeve* FC425 (dash size)	Firesleeve* 624 (dash size)	Firesleeve Clamp FF9217 (dash size)	Heavy Duty Support Clamp FF9031 (dash size)
GH663-24	-8S	-30	-8S	-13		-38	-38	-0648S	-483
GH663-32	-13S	-30	-12S	-30		-46	-46	-0664C	-635
GH681-4	-1S	-6	-1S	-1		-12	-11	-0622S	-127
GH681-6	-12S	-10	-2S	-21		-16	-14	-0622S	-160
GH681-8	-14S	-12	-3S	-4		-16	-16	-0622S	-205
GH683-4		-6	-1S	-1		-12	-11	-0622S	-127
GH683-6	-12S	-10	-2S	-3		-16	-14	-0622S	-174
GH683-8	-15S	-10	-3S	-5		-16	-16	-0622S	-205
GH781-4	-1S	-8	-13S	-2		-12	-12	-0622S	-137
GH781-6	-2S	-10	-2S	-3		-16	-16	-0622S	-174
GH781-8	-14S	-12	-3S	-5		-16	-18	-0622S	-205
GH781-10	-4S	-12	-5S	-6		-20	-18	-0630S	-239
GH781-12	-5S	-16	-14S	-9		-24	-22	-0648S	-280
GH781-16	-7S	-22	-7S	-10		-24	-28	-0648S	-357
GH781-20	-7S	-22	-9S	-12		-28	-28	-0648S	-422
GH781-24	-8S	-30	-8S	-13		-38	-38	-0648S	-508
GH781-32	-13S	-30	-12S	-30		-46	-46	-0664C	-635
GH793-4	-1S	-8	-13S	-2		-12	-12	-0622S	-150
GH793-6	-15S	-10	-2S	-4		-16	-16	-0622S	-190
GH793-8	-3S	-12	-3S	-5		-16	-18	-0622S	-222
GH793-10	-4S	-16	-5S	-6		-20	-20	-0630S	-266
GH793-12	-5S	-16	-6S	-9		-20	-22	-0648S	-300
GH793-16	-7S	-22	-9S	-10		-24	-28	-0648S	-381
GH793-20	-8S	-30	-10S	-12		-32	-32	-0664C	-483
GH793-24	-10S	-30	-10S	-13		-38	-38	-0648S	
GH793-32	-13S	-30	-12S	-30		-46	-46	-0664C	-635

This chart is intended for reference use only. The information in this chart pertains strictly to material compatibility and is not intended to be used as an application guide. See pages 400-404 for application information. For information on specific applications not included in this catalog, please contact Eaton Aeroquip Inc.

*Sizes indicated are based on Hose O.D. only. If sleeve is to be placed over fittings, a larger sleeve size may be required, depending on type of fitting used.

Assembly Instructions ORS-TF (Wedge Type) Tube Fittings

1. Measure the length of the tube assembly from the flat face of the ORS adapter in one port to the face of the ORS adapter in the opposite port. The length of the tube should then be adjusted to account for the shoulder thickness of the sleeve. It is imperative that the routing leave a length of unbent tubing to fully enter the ORS fitting. This straight length must be free from surface defects, thin-out distortion, and ovality.



Size	Tube O.D. (inches)	Sleeve Shoulder Thickness "A" (inches)	Straight Tubing Required "B" (inches)
-04	.25 (1/4)	.07	.78
-06	.38 (5/8)	.08	.88
-08	.50 (1/2)	.09	1.00
-10	.63 (9/16)	.09	1.06
-12	.75 (3/4)	.09	1.19
-16	1.00 (1)	.09	1.25
-20	1.25 (1 1/4)	.09	1.31
-24	1.50 (1 1/2)	.09	1.38

2. Inspect the tubing to insure that no scratches, gouges, burrs or other surface defects are present. Cut the measured tubing squarely ($\pm 1^\circ$). A tubing cutter is the best tool for this, but a hacksaw or abrasive wheel can be used. Use only SAEJ356, SAEJ524, SAEJ525, or SAEJ526 tubing with a hardness not to exceed Rockwell B65.

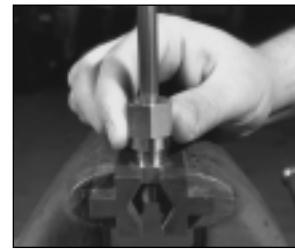


3. Deburr the tube ends with a deburring tool or fine cut file. After deburring, be sure to remove all contaminants and dirt from the interior and exterior of the tube.



4. Inspect ORS adapter and ORS-TF components for damage. Assure sealing surfaces are free from all surface gouges, scratches, dirt and contaminants. Inspect O-ring to insure that it is properly seated in the groove and is free from damage. Apply a thin film of compatible lubricant to the O-ring prior to installation.

5. Place a nut, ferrule and sleeve onto tubing, assuring that the identification groove of the ferrule is toward the nut. Assemble the nut to the adapter until "hand-tight" with the tubing fully inserted into the fitting until bottomed out. Mark the nut in relation with the adapter and tighten $1\frac{1}{2}$ turns with wrench. The ORS-TF sleeve cannot be used to preset multiple tube assemblies. It may be used once for pre-setting.

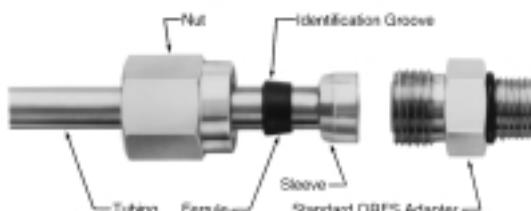


6. The ORS-TF tube assemblies are designed for re-use and can be reinstalled by tightening nut until a sharp increase in resistance is felt (approximately $\frac{1}{4}$ turn beyond "hand-tight").

7. **WARNING:** Tubing must be fully inserted into the fitting and the nut tightened as specified above to ensure performance and to prevent leakage and potential fitting blow-off. Excessive tightening of the nut beyond the recommended level may affect performance.



8. If connections must be temporarily disassembled, use a threaded plug to contain the ORS-TF components and keep contaminants and dirt from entering the system.



ORS®-Braze Type Tube Fittings

Brazing Instructions ORS-Braze Type Tube Fittings

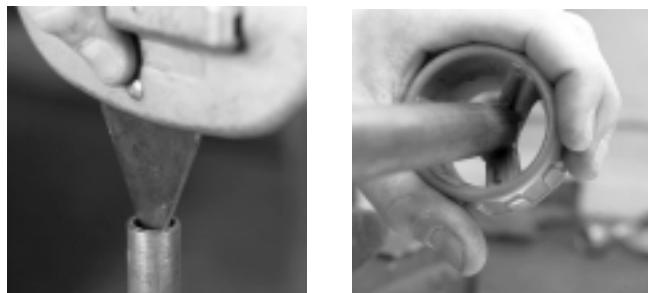
Tube Preparation

- Establish the required length of tubing. Allow for insertion depth in the ORS-Braze Type shoulder by adding the proper length of straight unbent tubing to enter into the shoulder counterbore. The counterbore depth is dependent upon the ORS-Braze Type shoulder size.

ORS-Braze Type Shoulder Size	Depth of Counterbore (inches)
-04	.25
-06	.25
-08	.38
-10	.38
-12	.38
-16	.50
-20	.50
-24	.50



- Cut the tubing squarely ($\pm 1^\circ$) to the proper length. A tubing cutter is the best tool for this, but a hacksaw or an abrasive wheel can be used.



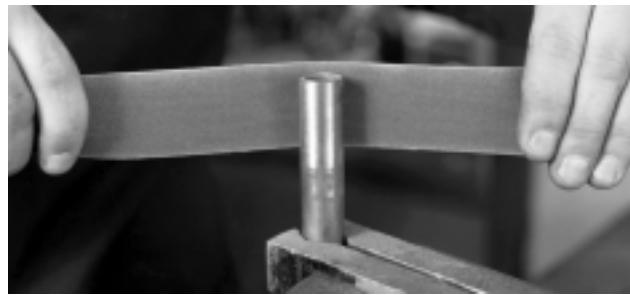
- Lightly deburr both I.D. and O.D. of tube.

Prepare the Tube



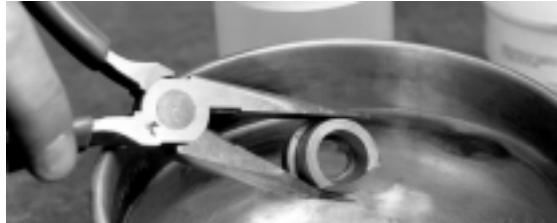
- Clean the end of the tube thoroughly using a liquid solvent* such as denatured alcohol, alkaline cleaner or equivalent. Avoid touching it because oily or greasy surfaces tend to repel the flux and silver material leaving voids and inclusions.

*CAUTION: Follow solvent manufacturer's recommendations for proper use. Follow approved procedures for disposal.



- Polish tube end to bare metal using silicon carbide emery cloth. It is important to remove all oil and grease first because abrasives tend to scrub the oil into the surface and/or impregnate it with a fine abrasive powder resulting in further contamination. Clean the tube end to remove the grit produced by the emery operation. Use either a clean solvent rinse or a clean, oil free soft cloth.

Prepare the Shoulder



- Degrease the shoulder thoroughly. Inspect for presence of rust. If rust is present, follow the steps detailed previously to emery the counterbore.

ORS®-Braze Type Tube Fittings**Prepare Braze Rings**

7. Degrease rings thoroughly. Preformed silver braze rings are available from Eaton Aeroquip. The preformed rings (Part Number FF9075-Size) will save you time and simplify your brazing even more.
If site-made rings are used, cut off a piece of silver wire* just short of three times the counterbore's diameter. For example, if the counterbore measured $\frac{3}{4}$ " you would cut $2\frac{3}{16}$ " of wire ($\frac{3}{4}$ " x $2\pi r = 2\frac{1}{4}$ "). Use needle-nose pliers to shape the silver wire into a ring.

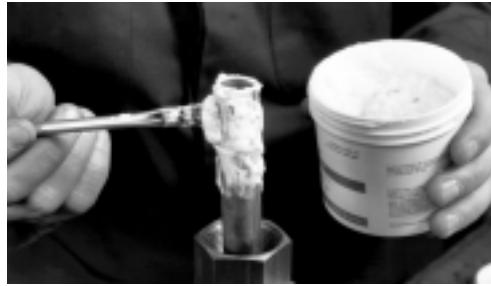
*If bulk wire is used it must contain a minimum of 45% silver content.

**Silver Braze Ring**

Part Number	Tube Size O.D. (inches)
FF9075-19	.25
FF9075-06	.38
FF9075-74	.50
FF9075-08	.63
FF9075-09	.75
FF9075-86	1.00
FF9075-87	1.25
FF9075-88	1.50

Trial Assembly

8. Fit the shoulder onto the tube; it should fit freely for the full counterbore depth. Eaton Aeroquip recommends minimal diametrical clearance. Do not touch or contaminate mating surfaces.

Fluxing and Assembly

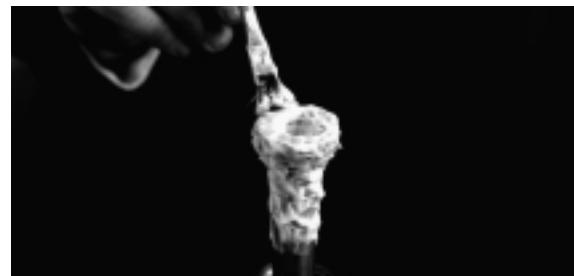
9. Clamp the tube snugly in a vise. Properly slip ORS-Braze Type nut (FC2326-SIZE-186) over the tube. The flux (high temperature 700°F to 1800°F is recommended) should be applied to all components and adjacent areas. This will minimize the heat scale formed, act as a temperature indicator, and promote proper alloy flow during the brazing process.



10. Lightly flux ORS-Braze Type shoulder (FC1229-SIZE) counterbore, install clean braze ring to bottom of counterbore, reflux counterbore.



11. Slip shoulder onto tube squarely and so that braze ring is snug between the tube and counterbore lip.



12. Flux outside surfaces of shoulder.

ORS®-Braze Type Tube Fittings

Brazing the Assembly



13. To properly braze the application of heat should bring both the tube and shoulder up to brazing temperature uniformly. Therefore, most of the heat should be directed to the shoulder and not the tube. The flux may be used as a guide:
- At +212°F the water boils off.
 - At +600°F to +700°F the flux becomes puffy and starts to "work" (bubbles).
 - At +800°F it lays against the surface and has a translucent appearance.
 - At +1100°F it has the appearance of dark clear water.
 - At +1125°F the silver braze ring melts and flows at +1145°F. At this point the shoulder should drop onto the tube a distance equal to the diameter of the braze ring, which is not melted and filling in the area between the counterbore and tube O.D. There should be visible braze material at both ends of the shoulder.

The braze joint area needs to be heated uniformly not just the O.D. surface. At brazing temperature the components will have a dark red to medium cherry red appearance. Do not overheat the parts as to char the flux. Remove the heat after the alloy has melted and pulled through the joint. Settle the shoulder onto the tube to insure proper insertion.

NOTE: The heating source should be varied. When using a flame, the fuel mixture should be adjusted so that the base of the flame is blue and there are also orange featherlike licks at the end of the flame.

14. Allow braze alloy to solidify completely before quenching. Cool the assembly in hot water (+180°F preferred) to help facilitate flux removal. Readily available flux removers can be added to the water. It is necessary to remove the flux residue because it is corrosive.

Braze Inspection

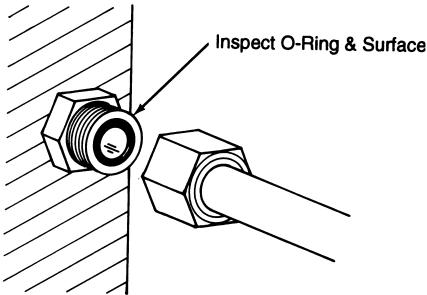


15. Inspect braze for a fillet all the way around the tube. Inspect the shoulder sealing surface. There should be no alloy overrun or alloy build-up on the sealing surface. An accumulation of braze alloy on the sealing surface or a void in the fillet is unacceptable and the shoulder should be replaced.

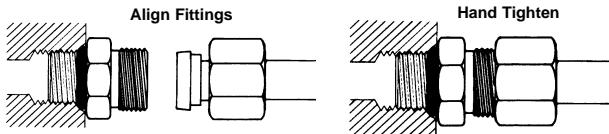


16. It is recommended to proof test the assembly in an enclosed chamber. Proof test pressure should be twice the system's operating pressure but should not exceed twice the recommended operating pressure of the tube or end connections.

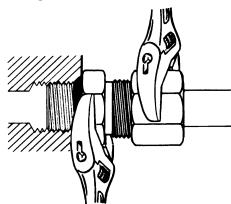
NOTE: The preceding procedure is recommended only. No guarantee or warranty is implied.

ORS® Tube Fittings**Assembly Instructions for ORS Tube Fittings,
Pipe Threads and SAE 37° (JIC) Flared Tube Fittings****Assembly Instruction for ORS Tube Fittings**

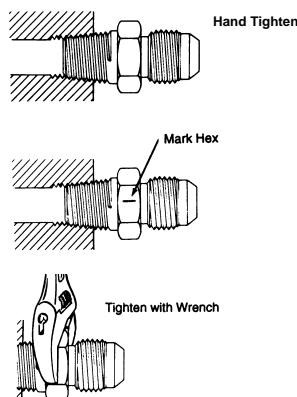
1. Inspect sealing surfaces and O-Ring groove for damage or foreign material. Check the O-Ring to insure that it is properly seated in the O-Ring groove.



2. Lubricate threads with heavy lubricant such as Aeroquip 222070 Lube.
3. Align the ORS Tube Fitting to the flat sealing connections and tighten the nut by hand. The nut should tighten easily by hand if properly aligned.



4. Complete the assembly by wrench tightening the nut to the recommended torque value on page 286.

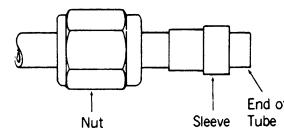
Assembly Instructions for Pipe Threads

1. Assemble connection hand tight.
2. Mark male and female.
3. Rotate male; 1½ turns if using thread sealant. 2 turns if not using thread sealant.

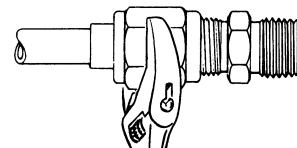
**Assembly Instructions for
Standard SAE 37° Flare Type Tube Fitting**

Use SAE J524 or SAE J525 tubing for best bending and flaring results.

1. Cut the tubing with a tube cutter. If a fine tooth hacksaw is used, make sure cut-off is square; remove burrs with deburring tool, emery paper or fine file. Clean all dirt and grit from the I.D. and O.D. of the tube.
2. Place the nut and then the sleeve onto tube. The threaded end of nut and flared end of sleeve must face the end of tube.



3. Flare the tube end with a flaring tool to provide a 37° flare. Check the flare for correct diameter, excessive thin out and burrs or cracks.
4. Lubricate all mating surfaces of nut, ferrule and body with a heavy lubricant such as Aeroquip 222070 Lube.
5. Assemble the nut and sleeve to body. Turn the nut hand tight then wrench tighten for a leakproof joint. See page 432, torque values, for assembly using a torque wrench.



The Aeroquip standard 37° flare fitting is easy to disassemble and may be reassembled repeatedly.

Versil·Flare™ Tube Fittings

Assembly Instructions for Versil·Flare™ Tube Fittings

Cutting

To insure a leak-proof joint, the tubing should be cut square ($\pm 1^\circ$). A tube cutter is preferred, but a hacksaw or abrasive wheel can be used.



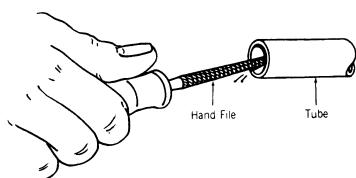
Out of Square Cut



Square Cut

Deburring

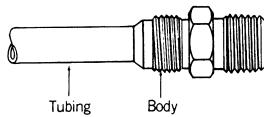
All cut tubes should be deburred. However, deburring is even more important if the tubing was cut with a hacksaw or abrasive wheel. Remove any burrs, both internally and externally, with a deburring tool, emery paper or fine file. Clean the tube before assembly. Clean all dirt and grit from the I.D. and O.D. of the tube.



Assembly Instructions for Aeroquip Versil·Flare™ tube fitting

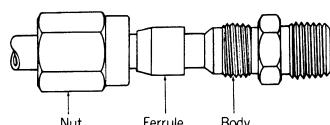
Tubing cut-off

1. Tube should be cut to fit tight against the face of standard SAE 37° flare body.



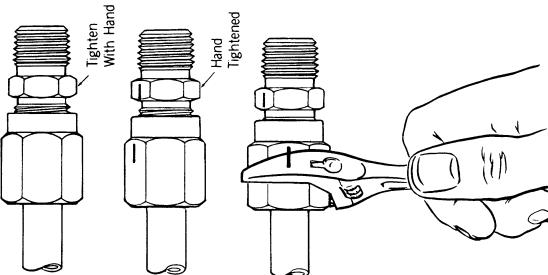
Initial assembly

1. Deburr the end internally and externally. Clean all dirt and grit from I.D. and O.D.
2. Slide the nut and then the ferrule into the tube. Make sure the tapered end of ferrule points toward the nut.



3. Lubricate all mating surfaces of nut, ferrule and body with a heavy lubricant such as Aeroquip 222070 Lube.
4. Place end of tube against standard SAE 37° flare body.

5. Slide the ferrule and nut against body and tighten the nut onto the body "Hand Tight." Mark the nut in relation to the body for location.



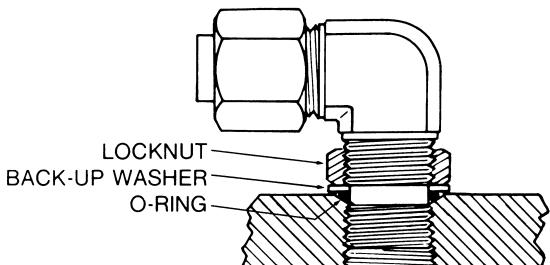
6. Hold tube against body and tighten nut a total of 1 1/4 turns on -3 through -10 and 1 1/2 turns -12 through -32.

Reassembly

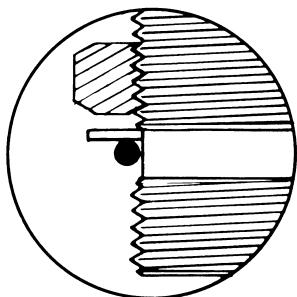
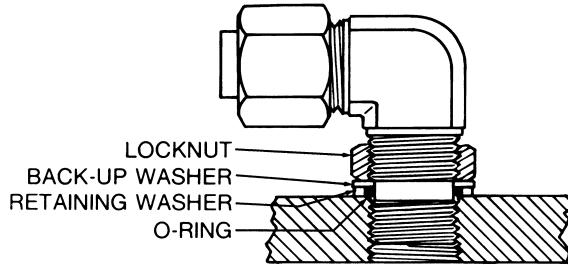
1. Slide nut against the body and tighten to "Hand Tight." Mark the nut for location.
2. Tighten nut a minimum of one "Hex" flat. The Aeroquip Versil·Flare™ flareless tube fitting is designed for a maximum of 10 reassemblies.

Assembly Instructions**Assembly Instructions – Adjustable O-Ring Boss**

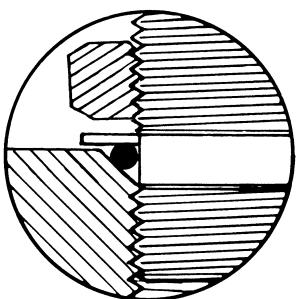
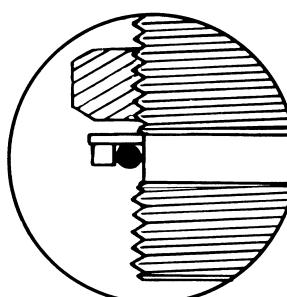
On SAE, and
BSPP threads without check washer



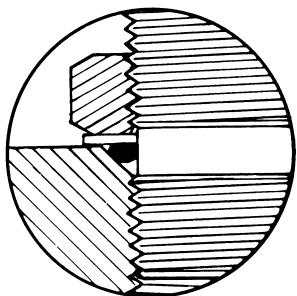
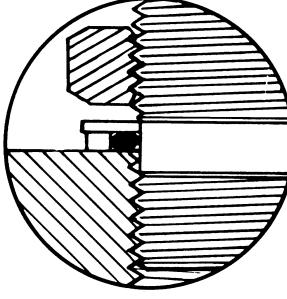
On BSPP
threads with check washer



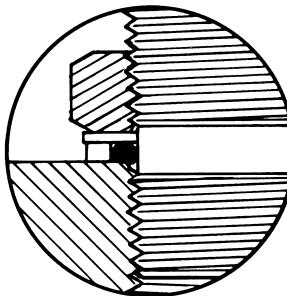
The O-Ring and back-up washer should be in the proper position on non-threaded section nearest to locknut. Lubrication of the O-Ring is recommended.



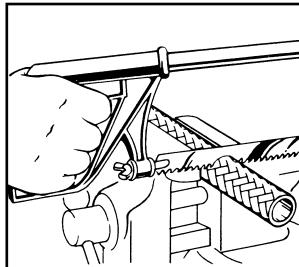
Tighten the fitting by hand into the straight thread boss until back-up washer contacts face of boss (left) or check washer when thread is BSPP (right).



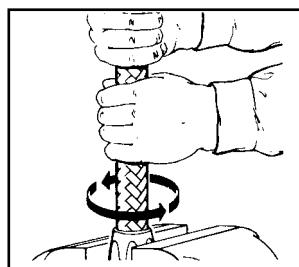
In order to position the fitting, unscrew up to one full turn then hold fitting in desired position and tighten locknut so that the back-up washer contacts face of boss and forces the O-Ring within boss cavity. With BSPP threads use same procedure. Difference consists in check washer being in contact with face of boss (right inset). Assemble to the respective assembly torque specified on pages 431-432.



Standard (mandrelless) reusable fittings with single wire braid, multiple textile braid, hydraulic, refrigeration, and LPG hose.
FC234, FC300, FC321, FC350, FC355, FC558, FC802, 302A, 303, 1503, 1540, 2580, 2651 (for fittings requiring mandrel, see page 374).

**Step 1**

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

**Step 2**

Put socket in vise.

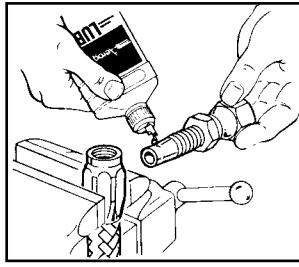
Screw hose counterclockwise into socket until in bottoms.

Back off $\frac{1}{4}$ turn.

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 into the hose counterclockwise until it bottoms.

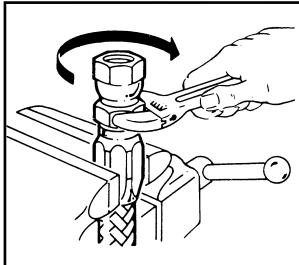
Back off $\frac{1}{4}$ turn.

Back off FC300, FC350 and FC355 $\frac{1}{4}$ to $\frac{1}{2}$ turn.

**Step 3**

Lubricate nipple and threads LIBERALLY. Use heavy oil or Aeroquip 222070 hose assembly lube.

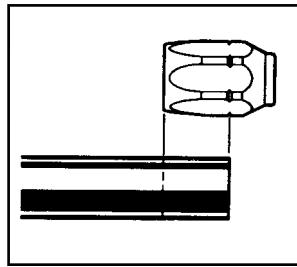
Special instructions for hose part numbers 1540, FC558 and FC802—use refrigerant grade oil compatible with system refrigerant for lubrication. Refer to lubricant compatibility chart in this catalog. Do NOT use petroleum based oils.

**Step 4**

Screw nipple clockwise into socket and hose. Leave $\frac{1}{32}$ " to $\frac{1}{16}$ " clearance between nipple hex and socket.

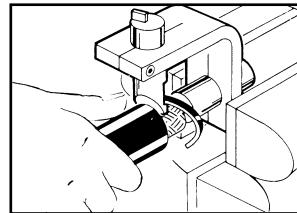
Recommendations for cleaning, inspection and testing are summarized on page 410. Disassemble in reverse order.

Standard reusable fittings with HI-PAC® and two wire braid hose FC195, FC310, FC510, 1529, 2766, 2781

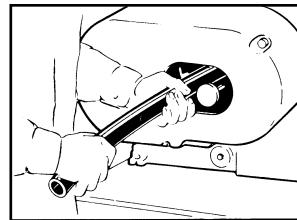
**Step 1**

Cut hose to length required using a fine-tooth hacksaw or cut-off wheel. Clean hose bore.

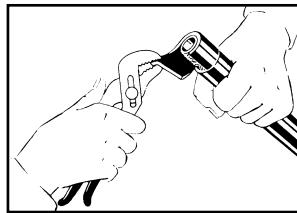
Hose must be stripped of its rubber cover before inserting in socket. Locate skiving point by putting hose end next to socket as shown. Measure from hose end of socket to notch on socket.



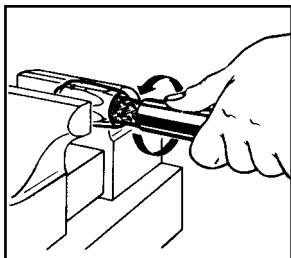
Skive Tool: Use the correct size Aeroquip FT1229 hose cover skiving tool. Mount the tool in a vise. Push the hose over the mandrel. Rotate the hose clockwise until it bottoms or secure hose in a vise and attach FT1279 auger to the skive tool. Insert mandrel into the hose and rotate clockwise until it bottoms.



Machine: Use the Aeroquip S1102 cut-off and skiving machine. Consult the owners manual. Select the correct mandrel. Turn on the machine. Put the hose over the mandrel and rotate.

**Step 1A****Skive Hose:**

By Hand: Cut rubber cover around down to wire reinforcement. Slit lengthwise. Raise flap and pull off with pliers. Clean excess rubber off wire reinforcement with wire brush or soft wire wheel. Do not fray or flare wire reinforcement when brushing.

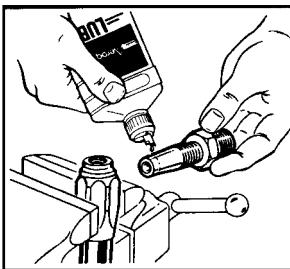
**Step 2**

Put socket in vise.

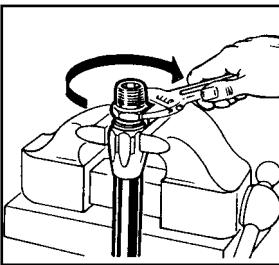
Screw hose into socket counterclockwise until it bottoms.

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.

NOTE: Sockets for hose fittings in the -16, -24 and -32 sizes are furnished with internal annular grooves in place of helical grooves (all FC310 and FC510 hose sockets are annular grooved). Install socket by pushing hose into socket with a back and forth rocking and twisting motion until hose bottoms on shoulder of socket.

**Step 3**

Lubricate nipple threads and inside of hose liberally. Use heavy oil or Aeroquip 222070 hose assembly lube.

**Step 4**

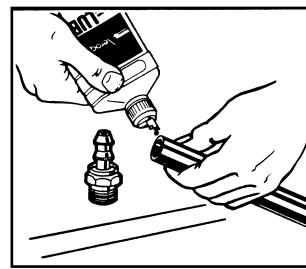
Screw nipple clockwise into socket and hose.

Leave $\frac{1}{32}$ " to $\frac{1}{16}$ " clearance between nipple hex and socket.

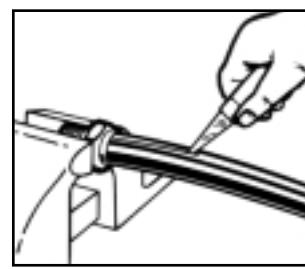
Recommendations for cleaning, inspection and testing are summarized on page 410. Disassemble in reverse order.

SOCKETLESS™ Fittings with textile braid low pressure hose

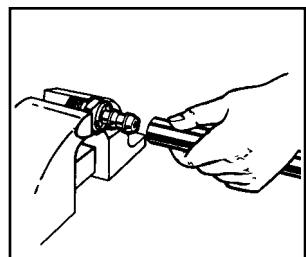
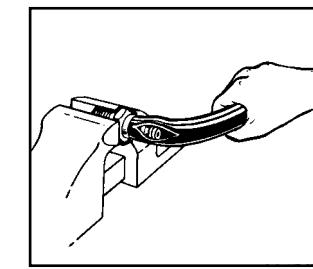
FC332, FC647, 2556, 2565, 2575

**To Assemble****Step 1**

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

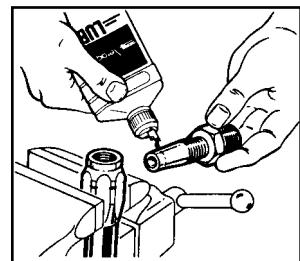
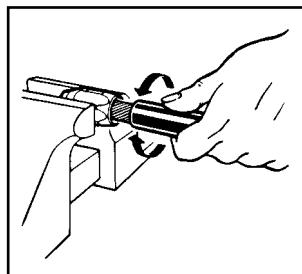
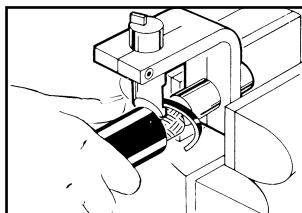
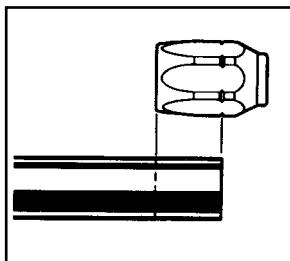
**To Disassemble****Step 1**

Slit hose lengthwise from protective cap to end of nipple.

**Step 2****Step 2**

Bend hose, then snap hose off with a quick tug.

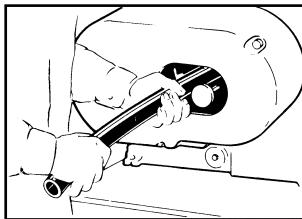
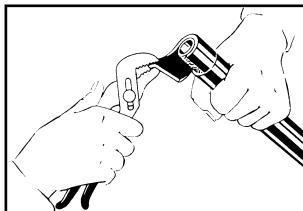
Standard reusable fittings with four spiral wire hose
FC136, FC324, GH493, FC736



Step 1

Cut hose to length required using a fine-tooth hacksaw or cut-off wheel. Clean hose bore.

Hose must be stripped of its rubber cover before inserting into socket. Locate skiving point by putting hose end next to socket as shown. Measure from hose end of socket to notch on socket.



Step 1A

Skive Hose:

By Hand: Cut rubber cover around down to wire reinforcement with a knife. Slit lengthwise. Raise flap and pull off with pliers. Clean excess rubber off wire reinforcement with wire brush or soft wire wheel. Do not fray or flare wire reinforcement when brushing.

Machine: Use the Aeroquip S1102 cut-off and skiving machine. Consult the owners manual. Select the correct mandrel. Turn on the machine. Put the hose over the mandrel and rotate counterclockwise.

Step 2

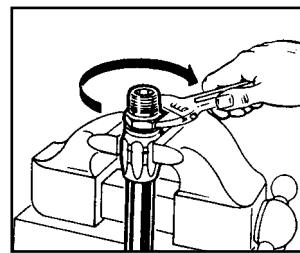
Sockets for hose fittings are furnished with internal annular grooved design. Install socket by pushing hose into socket with a back and forth rocking and clockwise twisting motion until hose bottoms on shoulder of socket.

An alternate method is to insert the hose in a vise. Install socket by pushing onto the hose with a back and forth rocking and clockwise twisting motion until the hose bottoms on the shoulder of socket.

A rawhide hammer or similar tool may be used to tap the socket onto the hose but avoid damage to internal socket threads. Be sure not to damage hose cover or wire reinforcement.

Step 3

Liberally lubricate nipple threads and inside of hose. Use heavy weight oil or Aeroquip 222070 hose assembly lube.

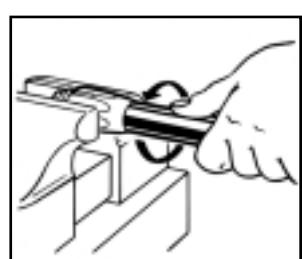
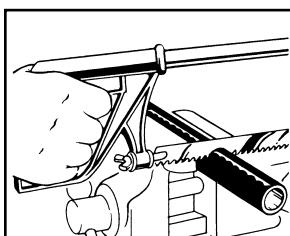


Step 4

Screw nipple clockwise into socket and hose. Leave a $1\frac{1}{32}$ " to $1\frac{1}{16}$ " clearance between nipple hex and socket.

Recommendations for cleaning, inspection and testing are summarized on page 410. Disassemble in reverse order.

Thru-the-cover style reusable fittings with hose FC211, FC212, GH663, GH793



Step 1

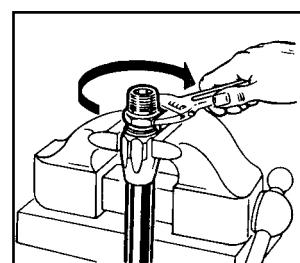
Cut hose to length required using a fine tooth hacksaw or cut-off machine. Clean hose bore.

Step 2

Liberally lubricate hose cover with Aeroquip hose assembly lube.

Place socket in vise and turn hose into socket counterclockwise 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.



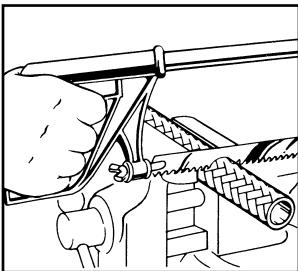
Step 3

Liberally lubricate nipple threads and inside of hose. Use heavy weight oil or Aeroquip 222070 hose assembly lube.

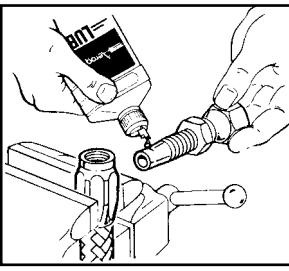
Recommendations for cleaning, inspection and testing are summarized on page 410. Disassemble in reverse order.

HOSE AND
REUSABLE FITTINGS

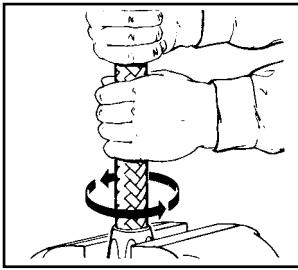
Standard (mandrelless) reusable fittings with engine, air brake and railroad air brake hose 1531, 1531A, 2550, 2554, 2555, 2570 (for fittings requiring mandrel, see page 373)

**Step 1**

Cut hose square to length required with fine-tooth hacksaw or cut-off wheel. Clean hose bore.

**Step 3**

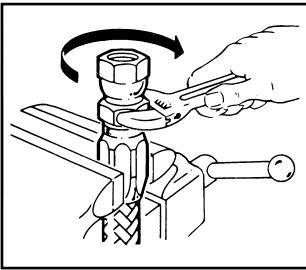
Lubricate nipple threads and inside of hose LIBERALLY with Aeroquip 222070 hose assembly lube or heavy weight oil.

**Step 2**

Put socket in vise. Screw hose counterclockwise into socket until hose bottoms. Back off $\frac{1}{4}$ turn.

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 into the hose counterclockwise until it bottoms. Back off $\frac{1}{4}$ turn.

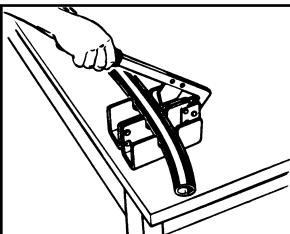
NOTE: For 2550, 2554, 2555 and 2570 hose: Sockets for these hose fittings are furnished with internal annular grooved design. Install socket by pushing hose into socket with a back and forth rocking and twisting motion until hose bottoms on shoulder of socket. Back off $\frac{1}{4}$ turn.

**Step 4**

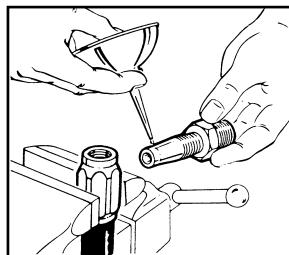
Screw nipple clockwise into socket and hose. Leave a $\frac{1}{32}$ " to $\frac{1}{16}$ " clearance between nipple hex and socket.

Recommendations for cleaning, inspection and testing are summarized on page 410. Disassemble in reverse order.

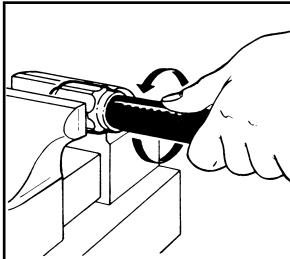
Standard reusable fittings with Polyon™ Thermoplastic hose FC372, FC373

**Step 1**

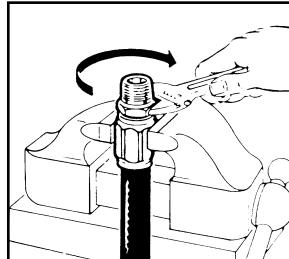
Cut hose square to required length using either the Aeroquip FT1258 bench mounted cut-off tool (pictured) or some other sharp cutting device. (Do not use a hacksaw or abrasive wheel.) Remove any burr developed in cutting the hose.

**Step 3**

Liberally lubricate nipple threads and inside of hose. Use heavy weight oil or Aeroquip 222070 hose assembly lube.

**Step 2**

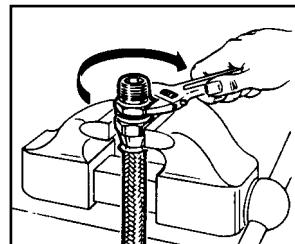
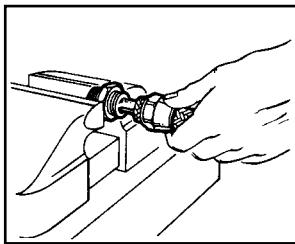
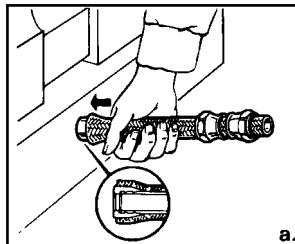
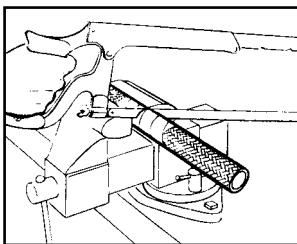
Put socket in vise. Screw hose counterclockwise into socket until hose bottoms.

**Step 4**

Screw nipple clockwise into socket and hose. Leave a $\frac{1}{32}$ " to $\frac{1}{16}$ " clearance between nipple nut and socket.

Recommendations for cleaning, inspection and testing are summarized on page 410. Disassemble in reverse order.

"super gem"® Fittings with Teflon hose
FC186, FC465, 2807, 2808



Step 1

Wrap hose with masking tape at cut-off point and cut square to length through taped area using a cut-off machine or fine-tooth hacksaw. Remove tape and trim any loose wires flush with tube stock. Any burrs on the bore of the tube stock should be removed with a knife. Clean the hose bore. Sometimes wire braid will tend to "neck down" on one end and flare out, on the opposite end. This is a characteristic of wire braid hose and can be used to an advantage in the assembly of the "super gem"® sockets. Slip two sockets back to back over the "necked down" end of the hose.

Step 2

- Push the sleeve over the end of the tube and under the wire braid by hand. Complete positioning of the sleeve by pushing the hose end against a flat surface. Visually inspect to see that tube stock butts against the inside shoulder of the sleeve.
- Set the sleeve barbs into the Teflon tube by using assembly tool FT1038A or working the hose bore over the nipple into the end of the sleeve and tube. Assembly kit FT1081 is also available.

Step 3

Lubricate nipple and socket threads. For stainless steel fittings, use a molydisulfide base lubricant (e.g., Molykote® Type G), **lubricants containing chloride are not recommended**. Other material combinations use standard petroleum lubricants. Hold the nipple with hex in vise. Push hose over nipple with twisting motion until seated against nipple chamfer. Push socket forward and hand start threading of socket to nipple.

Step 4

Wrench tighten nipple hex until clearance with socket hex is $1/32$ " or less. Tighten further to align corners of nipple and socket hexes. Recommendations for cleaning, inspection and testing are summarized on page 410.

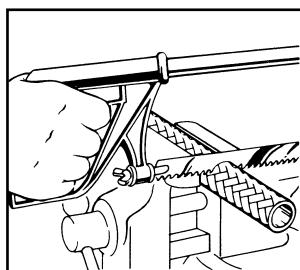
To disassemble: Unscrew and remove nipple; slide socket back on hose by tapping against flat surface; remove sleeve with pliers. New sleeves are recommended upon reuse of the fitting.

*Molykote Type G is a registered trademark of the Alpha Molykote Corporation.

HOSE AND REUSABLE FITTINGS

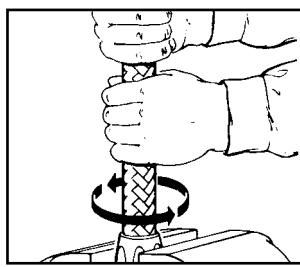
Mandrel Type Fittings—

Standard reusable fittings with single wire braid, multiple textile braid, hydraulic, refrigeration, LPG hose, engine and air brake hose
FC234, FC300, FC321, FC350, FC355, FC558, FC802, 302A, 303, 1503, 1540, 2580, 2651



Step 1

Cut hose square with fine-tooth hacksaw or cut-off wheel. Clean hose bore.



Step 2

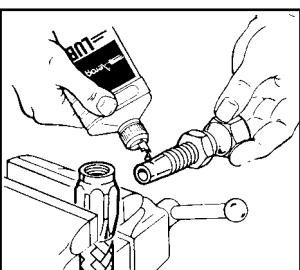
Put socket in vise.

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 $\frac{1}{4}$ turn.

Back off FC300, FC350 and FC355 hose $\frac{1}{4}$ to $\frac{1}{2}$ turn.



Step 3

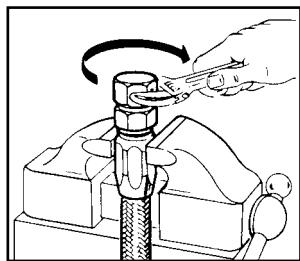
MALE ENDS: Push assembly tool into nipple.

SWIVEL ENDS: Tighten nipple and nut on assembly tool.

Lubricate nipple, mandrel and inside of hose liberally. Use heavy oil or Aeroquip 222070 hose assembly lube.

Special instructions 1540, FC558 and FC802 hose—use refrigerant grade oil compatible with system refrigerant for lubrication. Refer to page 404. Do not use petroleum based oils.

Step 4



MALE ENDS: Screw nipple clockwise into socket and hose. Leave a $\frac{1}{32}$ " to $\frac{1}{16}$ " clearance between nipple hex and socket.

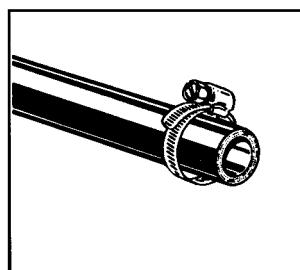
SWIVEL ENDS: Screw nipple clockwise into socket and hose. Leave $\frac{1}{32}$ " to $\frac{1}{16}$ " clearance between nut and socket.

Recommendations for cleaning, inspection and testing are summarized on page 410. Disassemble in reverse order.



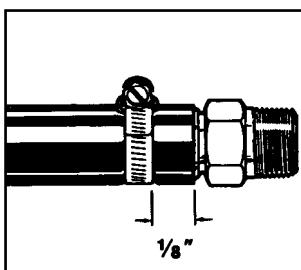
Nipple and clamp with suction hose

FC318, 2661, FC619



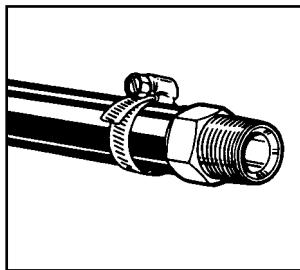
Step 1

Cut hose square to length required using a fine-tooth hacksaw or cut-off wheel. Clean hose bore. Slide band clamp over hose cover.



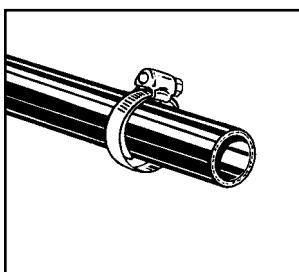
Step 3

Space band clamp $\frac{1}{8}$ " from end of hose. Tighten clamp to 100 in.-lbs. Recommendations for cleaning, inspection and testing are summarized on page 410.

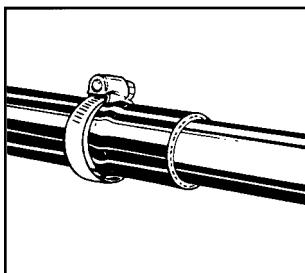


Step 2

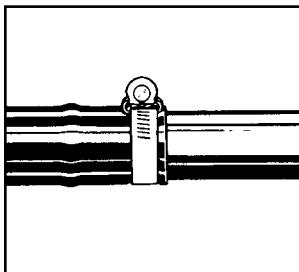
Insert nipple into hose until hose end bottoms on nipple shoulder.

Silicone hose
FC252/FC352**Step 1**

Cut hose square to length required with a sharp knife. Slide extended tang hose clamp over hose cover.

**Step 2**

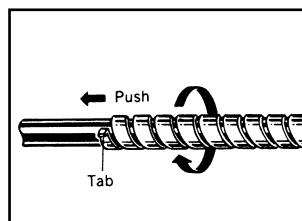
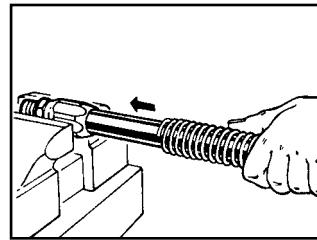
Push hose over beaded tube.

**Step 3**

Locate extended tang hose clamp near the end of hose and tighten the clamp.

Clamps: Extended tang hose clamps or clamps with a shoe are recommended for securing to formed and beaded male tube ends.

CAUTION: Do not use wire type clamps for securing silicone hose.

900705 Steel protective coil sleeve
900564 Steel protective coil spring**900705 sleeve****900564 spring****Step 1**

Follow the appropriate assembly instructions through the assembly of one end fitting. Insert one end fitting in vise.

Step 2

Cut coil length. Coil should be cut to overall assembly length "OA" minus the sum of the overall length of each end fitting. ("A" dimension).

Step 3**3a) 900705 Steel Protective Coil Sleeve**

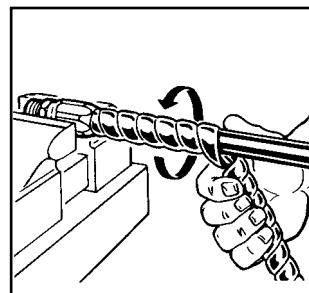
The hose and the coil should be held straight. Taping or capping the hose end can prevent frayed wire ends from snagging on the coil. Bend one end to the coil outward to form a slight tab to assist grasping. (Cut off or bend back when installation is complete.) Hold the tab with the thumb of one hand while twisting the coil clockwise approximately one foot back from the coil tab. When the coil opens up sufficiently, slip the tab end to the coil over the hose. Move the coil onto the hose by pulling at the tab end while pushing with the other hand. Be careful not to exceed the resiliency of the coil by stretching it too far.

3b) 900564 Steel Protective Coil Spring

Slide coil over hose.

Step 4

Proceed with assembly of second end fitting.

900952 Plastic coil sleeve**Step 1**

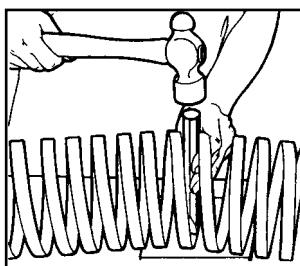
Follow the appropriate hose assembly instructions through the assembly of both end fittings. Insert end fitting in vise.

Step 2

Cut coil length. Coil should be cut to overall assembly length "OA" minus the sum of the overall length of each end fitting. ("A" dimension).

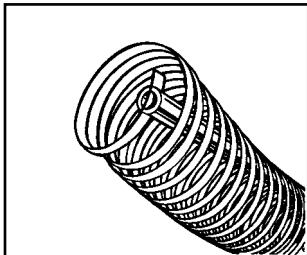
Step 3

Wrap the coil on the hose.

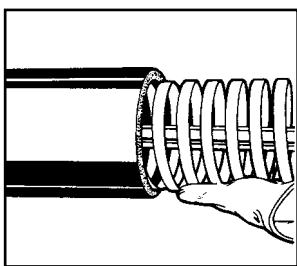
HOSE AND
REUSABLE FITTINGS**Internal support coils**
222005, 222022**Step 1**

Cut coil length. The coils should be cut to the hose length, minus the nipple intrusion. For any given hose assembly the support coil length equals the overall hose assembly length minus the sum of the overall lengths of each end fitting. ("A" dimensions.)

Small size of the coil can usually be cut with strap cutters or sheet metal shears. The larger sizes are best cut with a heavy sharp chisel or bolt cutter. With small sizes skip directly to Step 3.

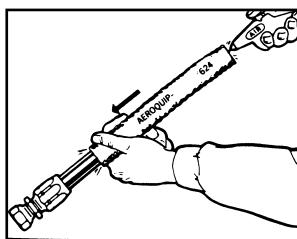
**Step 2**

Compress the coil (large sizes only). It is necessary to reduce the coil diameter slightly in order to insert it into the hose. The easiest approach is to use a length of pipe with a notch cut in one end. Clamp the plain end of the pipe in a vise, slide the coil over the pipe and insert the free end of the coil into the notched end of the pipe. Then clamp the coil and pipe firmly together. Twist the coil to compress it prior to installation into the hose.

**Step 3**

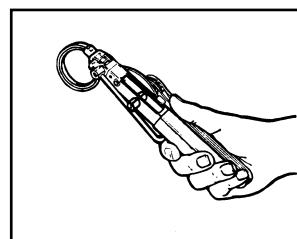
Small sizes: The coil can be worked into the hose by hand without difficulty. Remove all burrs from the coil prior to insertion. This will prevent cutting of the hose tube. Position the coil midway between hose ends.

Large sizes: With the pipe still in position, as in Step 2, assemble the hose over the coil. With the coil fully centered in the hose, remove the pipe and clamp.

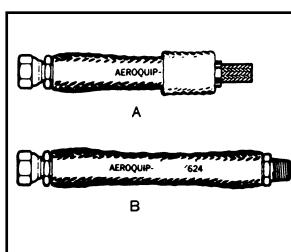
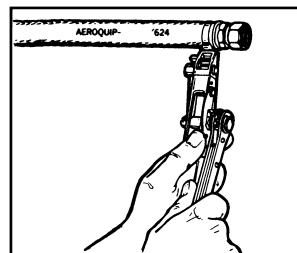
Firesleeve
624**Step 1**

Follow the appropriate hose assembly instructions through the assembly of one end fitting. Cut firesleeve to same length as hose; using Firesleeve End Dip (AE13702-003) dip ends of firesleeve to a depth of three quarters of an inch and allow to dry at room temperature.

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 3**

Insert tail of band clamp into hand clamping tool.

**Step 4**

Position band clamp over sleeve as shown and then draw tight with hand tool. Remove tool and cut free end of band clamp. Repeat on other end of assembly. To complete, bend protruding tail of clamp over clamp buckle. Also repair any scuffs or minor abrasions of firesleeve by brush application of End Dip AE13702-003.

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)



The new ProCrimp 1380 crimp machine from Aeroquip crimps all your hose needs up to and including -20 SAE100R12 hose styles and the popular MatchMate Plus hose and fittings program (shown with optional die holder kit FT1380-2-4). The ProCrimp 1380 is electronically controlled to give fast, accurate crimps the first time and every time you need a hose assembly. The electronic keypad is easy to adjust, with up to 10 programmable crimp settings. For hose styles and sizes used less frequently simply enter the 3 digit code of that hose. The ProCrimp 1380 comes complete with a standard power unit from ENERPAC®, a name, like Eaton Aeroquip, which is synonymous with quality, worldwide.

ProCrimp® 1380

Ordering Instructions

FT1380-115	115V crimp machine 60 Hz
FT1380-115-5	2-Wire braid hose package FT1380-115 with the 5 die cages needed to crimp the 5 most popular GH793 or GH781 2-wire hose sizes: -4, -6, -8, -12 and -16 Die Cages
FT1380-200-M150	FT1380-200-M210
FT1380-200-M240	FT1380-200-M320
FT1380-275-M370	
FT1380-115-8	Braided and spiral hose package FT1380-115-5 with the 3 additional die cages — capable of crimping all MatchMate Plus hoses through -20 Die Cages
FT1380-200-M180	FT1380-200-M280
FT1380-275-M465	
FT1380-2-3	FT1330 to FT1380 Die Cage conversion kit — back plate, bolts and instructions necessary to convert an FT1330 die cage to an FT1380 die cage. Simply remove the FT1330 back plate and replace it with the new FT1380 back plate.
FT1380-2-4	Optional die holder kit — Kit includes 4 die holder plates each of which will hold 2 die cages. Holes are pre-drilled on base of ProCrimp machine to accept these 4 plates.

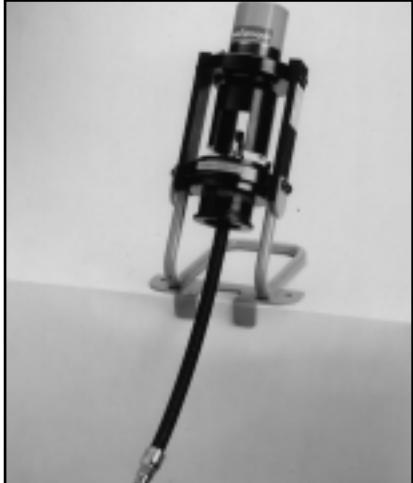
Electrical Requirements

USA: FT1380-115 standard machine uses 115V, 60 Hz, 1 hp

Brazil: FT1380-1-2 standard machine uses 230V, 60 Hz, 1 hp

Australia: FT1380-230 standard machine uses 230V, 50 Hz, 1 hp

Canada: FT1380-115 standard machine. Requires CSA (Canadian Standards Association) approval. The FT1380-115 is CSA approved and is so noted on the nameplate.



ProCrimp® 1310

Light, small and affordable, the ProCrimp 1310 Machine is capable of crimping -4 through -16 Aeroquip Global TTC fittings for GH663, GH781 and GH793 Hose.

Features

- Weighs only 33 lbs.
- Tool kit, including dies and hand pump weighs only 35 lbs.
- Die sets are stepped for ease of fitting location
- Operates with hand, air or electric hydraulic pumps
- Crimp capacity of -4 through -16 Global TTC fittings
- Will crimp GH663, GH781 and GH793 Hose
- Dimensions: 10"W x 12"D x 19"H

Ordering Instructions

FT1310*	Machine only
FT1310-1-1**	Machine with hand pump
FT1310-1-2**	Machine with air/hydraulic pump (requires 100 psi 20 CFM air supply)
FT1310-1-3**	Machine with 115V AC electric/hydraulic pump
FT1310-1-4**	Machine with 12V DC electric/hydraulic pump

FT1310-2-11 optional shim kit is required for crimping GH781 hose.

FT1310-2-8 optional shim kit is required for crimping GH663 hose.

The above packages include the basic machine, owner's manual and a tool kit. The die sets will crimp -4, -6, -8, -12, and -16 size hose.

*The ProCrimp 1310 Machine requires a 10,000 psi hydraulic pump for proper operation.

**Kit includes a hose assembly to connect the pump to the ProCrimp 1310 Machine.



ProCrimp® 1390

Crimped hose assembly machine

Hose Specifications

All styles from $\frac{3}{16}$ " through 2" I.D. including four and six spiral wire requiring internal skive crimp style fittings.

Features

- Front-end loading design
- Electronic key pad control of crimp diameter
- Power return stroke, return limit control
- Drop-in tooling (crimp die cages)
- Backstop fitting locator
- Width 29", Depth 28", Height 49", Weight 825 lbs.
- Worklamp

Ordering Instructions

FT1390-115 Aeroquip crimp machine, 115V, single phase, 60 Hz,
 1 hp motor

FT1390-115-12 Kit includes FT1390-115 machine plus the die cages to crimp
 -4 through -32 MatchMate Plus fittings as noted on page 378.

FT1092 NEVER-SEEZ lubricant

Electrical Requirements

Standard

115V, single phase, 60 Hz, 1 hp.

Optional 230 Volt Machines

FT1390-23050 230V, single phase, 50 Hz crimp machine

FT1390-23050-12 FT1390-23050 with 12 die cages.

FT1390-23060 230V, single phase, 60 Hz crimp machine

FT1390-23060-12 FT1390-23060 with 12 die cages.

Crimp Die Cages

Aeroquip crimp die cages provide simple "drop-in" tooling for the FT1390 crimp machine. See Crimp Die Cage Applications chart or contact Aeroquip. Refer to Bulletin JA55 for current crimp specifications.

Crimp Die Cage Storage Cabinet

Eaton Aeroquip recommends crimp die cages be kept free of dust or dirt. As an option, a cabinet is offered which has the capability of storing nine crimp die cages. Order by part number FT1283.

Crimp Cages for FT1380 and FT1390

FT1307–200-size die cages can be used in FT1390 crimp machine.

Crimp Die Cage Applications		
Die Cage Part Number	Crimp Range	Hose Styles
FT1307–200–M070	7.0 mm to 9.0 mm .279 in to .354 in	Smooth Bore PTFE Convoluted PTFE Polyon SAE100R1AT SAE100R1A
FT1380–200–M090	9.0 mm to 12.0 mm .354 in to .472 in	SAE100R2AT SAE100R2A
FT1307–200–M120	12.0 mm to 15.0 mm .472 in to .590 in	HI-PAC SAE100R4
FT1380–200–M120		SAE100R6 SAE100R7
FT1307–200–M150*	15.0 mm to 18.0 mm .590 in to .709 in	SAE100R8 SAE100R9
FT1380–200–M150**		SAE100R10 SAE100R11
FT1307–200–M180*	18.0 mm to 21.0 mm .709 in to .827 in	SAE100R12 SAE100R13
FT1380–200–M180**		For crimp specifications on Global Skive type fittings and Global TTC & TTC12 request Bulletin JA55 or contact Eaton Aeroquip for specialty hoses.
FT1307–200–M210*	21.0 mm to 24.0 mm .827 in to .945 in	*FT1390–115–12 kit includes these die cages.
FT1380–200–M210**		**FT1380–115–8 kit includes these 8 die cages.
FT1307–200–M240*	24.0 mm to 28.0 mm .945 in to 1.102 in	Die Cage Repair Kit Complete kit, less dies.
FT1380–200–M240**		To Repair Order FT1307–200–size FT1307–2–9 FT1380–200–size FT1380–2–9 FT1380–275–size FT1380–2–9 FT1380–201–size FT1380–2–9A
FT1307–200–M280*	28.0 mm to 32.0 mm 1.102 in to 1.260 in	
FT1380–200–M280**		
FT1307–200–M320*	32.0 mm to 37.0 mm 1.260 in to 1.457 in	
FT1380–200–M320**		
FT1307–200–M370*	37.0 mm to 42.0 mm 1.457 in to 1.656 in	
FT1380–275–M370**		
FT1307–200–M420*	42.0 mm to 46.5 mm 1.656 in to 1.831 in	
FT1380–275–M420		
FT1307–200–M465*	46.5 mm to 52.0 mm 1.831 in to 2.047 in	
FT1380–275–M465**		
FT1307–200–M520*	52.0 mm to 55.0 mm 2.047 in to 2.244 in	
FT1380–275–M520		
FT1307–200–M550*	55.0 mm to 69.0 mm 2.165 in to 2.716 in	
FT1380–275–M550		
FT1307–200–M690*	69.0 mm to 73.0 mm 2.716 in to 2.874 in	
FT1380–275–M690		

NOTE: Additional dies and die cage assemblies also available. Refer to Bulletin JA55 or contact Eaton Aeroquip.



ProCrimp® 1380P

Perfect for maintenance and repair of all your hose needs and designed to be used in remote or portable stations, the new ProCrimp 1380P will handle through -20 SAE100R12 hose and fittings. All die cages, crimp diameters and approved hose and fitting combinations are identical to Aeroquip's popular FT1380 crimper. Crimp diameters are controlled using a micrometer and specially designed hydraulic circuit that allows for precise and adjustable finished crimp diameters.

The new ProCrimp 1380P may be ordered separately or with your choice of three power options, including a new high volume hand pump, an Air/Hydraulic power unit or a 12-volt DC power unit.

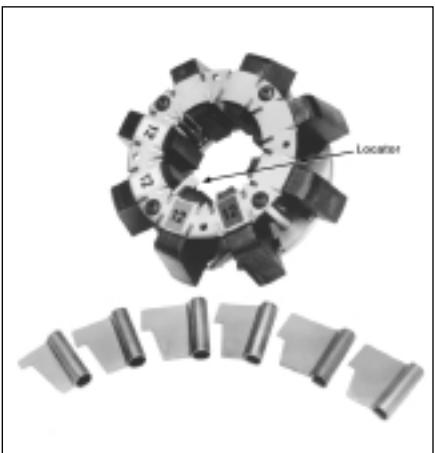
Ordering Instructions

- | | |
|---------------|---|
| FT1380P-1-1 | Machine with hand pump |
| FT1380P-1-1-5 | Machine with hand pump and 5 die cages |
| FT1380P-1-1-8 | Machine with hand pump and 8 die cages |
| FT1380P-1-2 | Machine with Air/Hydraulic pump |
| FT1380P-1-2-5 | Machine with Air/Hydraulic pump and 5 die cages |
| FT1380P-1-2-8 | Machine with Air/Hydraulic pump and 8 die cages |
| FT1380P-1-3 | Machine only |
| FT1380P-1-3-5 | Machine with 5 die cages |
| FT1380P-1-3-8 | Machine with 8 die cages |
| FT1380P-1-4 | Machine with 12 volt DC pump |
| FT1380P-1-4-5 | Machine with 12 volt DC pump and 5 die cages |
| FT1380P-1-4-8 | Machine with 12 volt DC pump and 8 die cages |

5 die cages

- | | |
|-----------------|-------------------------------|
| FT1380-200-M150 | Include the 5 die cages plus: |
| FT1380-200-M210 | FT1380-200-M180 |
| FT1380-200-M240 | FT1380-200-M280 |
| FT1380-200-M320 | FT1380-275-M465 |
| FT1380-275-M370 | |

8 die cages



MatchMate Plus fitting locators

For use with FT1380 and FT1330 "M" Series die cages

Consistent crimping of MatchMate Plus fittings is greatly simplified when using Aeroquip's new fitting locators. The locators are designed for easy installation and use on the Aeroquip FT1380 or FT1330 "M" series die cages noted below.

Ordering Instructions

The locator kits can be ordered as part number FT1330-XL. Each kit contains locators to accommodate -4, -6, -8, -10, -12 and -16 MatchMate Plus fittings and installation instructions.

Locator Suffix	Die Cage Suffix	MatchMate Plus Hoses			
		GH663, GH194	GH793, GH195	GH781	GH493
-4, -4P	-M150	-4	-4	-4	
-6, -6P	-M180	-6		-6	-6
	-M210		-6	-6	-6
-8, -8P	-M240	-8	-8	-8	
-10, -10P	-M280		-10	-10	-8
-12, -12P	-M320	-12	-12	-12	-12
-16	-M370	-16	-16	-16	-16
None required	-M465		-20	-20	-20



FF10257 Sewer cleaning hose inspection kit

The sewer cleaning hose inspection kit comes complete with a blue inspection gauge, china marker and instructions.

Hose Part Number	Inspection Kit Part Number
FC700-10	FF10257-10
FC700-12	FF10257-12
FC700-16	FF10257-16
FC700-20	FF10257-20
FC701-12	FF10257-12
FC701-16	FF10257-16
FC701-20	FF10257-20
FC702-12	FF10257-12
FC702-16	FF10257-16



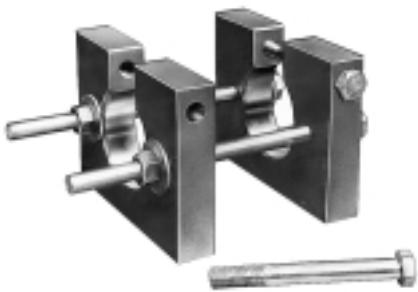
FT1282 Hand swage machine

Hose Specification

All styles on Polyon thermoplastic hose, $\frac{3}{16}$ " through 1" I.D. See Polyon fittings for die and pusher requirements.

Features

- Lightweight aluminum and steel construction
- Easy field assembly
- Portable
- Vise or bench mounted
- No electricity required
- $5\frac{1}{2} \times 6\frac{3}{8} \times 17\frac{1}{8}$ ", 12 lbs.



FT1284 Swage assembly tool

Hose Specification

For use with Polyon™ Sewer Cleaning hose.

Features

- Lightweight portable design for convenient on-the-job assembly
- Simple operation, only requires optional dies, 2 wrenches, yoke and lubricant to assemble hose and fittings

Specifications

- Size: $10\frac{1}{2}$ " long; $8\frac{1}{4}$ " wide; $6\frac{1}{2}$ " high
- Weight: $22\frac{1}{2}$ lbs.
- Material: steel

FT1284-100-10*	Swage die
FT1284-100-12A*	Swage die
FT1284-100-16A*	Swage die
FT1284-100-20A*	Swage die
FT1284-150-10	Pusher
FT1284-150-12	Pusher
FT1284-150-16	Pusher
FT1284-150-20	Pusher
FT1284-50-10†	Yoke
FT1284-50-12†	Yoke
FT1284-50-16†	Yoke
FT1284-50-20†	Yoke

*Two die sets required for swage mender assembly.

† Required for mender assembly.

**FT1097****Portable reusable hose assembly machine****Fitting Specifications**

- Any Aeroquip screw together reusable hose fitting with a hex size 2 $\frac{1}{8}$ " or smaller

Features

- Bench or stand mounted
- Easy to operate
- Convenient foot switch
- U.L. listed
- 102 RPM

Ordering Instructions

Machine:

FT1097-1-1 Base machine, 110V

FT1097-1-2 Base machine, 220V

FT1013-2-2 Machine stand

FT1220-10 Optional assembly tool kit (see below)

FT1097-2-1 Optional vise kit (see below)

Electrical Requirements

1/2 hp reversible, variable speed, universal motor; as the torque increases the speed decreases. 110V AC, single phase, 25-60 Hz, or 220V, AC, single phase, 25-60 Hz.

**FT1097-2-1
Vise kit for FT1097 machine**

The optional vise kit for the FT1097 reusable hose assembly machine includes all hardware necessary to install the kit. Aeroquip reusable hose fitting sockets are conveniently held secure during assembly.



FT1013 Portable reusable hose assembly machine

Fitting Specifications

- Fabric and single wire braid, -04 through -40
- Double wire and 4-spiral wire, -04 through -32

Features

- Quick acting wrench type chuck
- Easy to operate
- Safety guard
- Versatile
- Safety snap type switch
- Safety footswitch
- 36 rpm
- 45" x 56" x 46", 170 lbs.

Ordering Instructions

FT1013-1-5	Base machine, 110V, with vise
FT1013-1-6	Base machine, 220V, with vise
FT1013-1-3	Base machine, 110V, with stand, vise and socketing tool
FT1013-1-4	Base machine, 220V, with stand, vise and socketing tool
FT1013-1-1	Base machine, 110V, with tool kit, stand, vise and socketing tool
FT1013-1-2	Base machine, 220V, with tool kit, stand, vise and socketing tool
FT1013-2-1	Vise
FT1013-2-2	Stand
1562	Tool kit
FT1281	Socketing tool (see below)

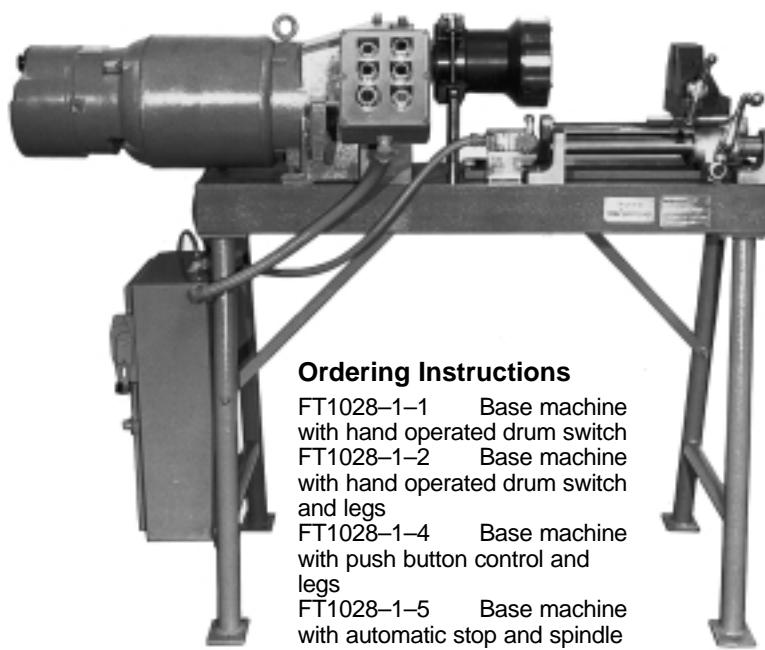
Electrical Requirements

1/2 hp reversible, variable speed, universal motor; as the torque increases the speed decreases. 110V AC, single phase, 25-60 Hz, or 220V AC, single phase, 25-60 Hz.



FT1281 Socketing tool

For use with stand mounted FT1013 and FT1097 Portable Hose Assembly Machine. (The FT1281 socketing tool must be accompanied by the FT1097-2-1 vise kit (see page 381) when used on the FT1097 portable hose assembly machine.)

**Ordering Instructions**

FT1028-1-1 Base machine with hand operated drum switch

FT1028-1-2 Base machine with hand operated drum switch and legs

FT1028-1-4 Base machine with push button control and legs

FT1028-1-5 Base machine with automatic stop and spindle control

FT1028
Production reusable hose assembly machine
Fitting Specifications

- Screw together fittings—Fabric or wire braided hose up to -32
- Screw together fittings—4 spiral wire hose up to -24

Features

- High volume production
- Ideal for 2 or 3 piece fittings
- 4 speed transmission; 90 rpm, 120 rpm, 210 rpm, 400 rpm
- Easy to operate
- Micrometer stop
- Electric brake
- U.L. listed
- 24" x 62" x 32", 550 lbs.

Electrical Requirements

220/440V, 3 phase, 60 Hz.

FT1234 Drop-in socket holder

The FT1234 drop-in socket holder is designed for the FT1028 assembly machine. They prevent rotation of the socket during assembly and provide a back stop to ensure consistent location of the socket.

Aeroquip Part No. FT1234	Hex Size (in.)	Hose Style	Socket Part Number and Size
-100	9/16	2807-4	1206-4
-101	5/8	2807-5, 1503-4, FC300-04 FC350-04, FC321-04	1206-5, 1210-4
-102	11/16	2807-6, 1503-5, FC300-5, FC350-5, FC321-05	1206-6, 1210-5
-104	13/16	1503-6, 1509-4, FC300-6, FC350-6, FC321-06	1210-6, 4010-4
-105	7/8	2807-8	1206-8
-106	15/16	1503-8, FC300-08, FC350-08, FC321-08	1210-8
-200	1	2807-10	1206-10, FC3214-10
-201	1	FC136-6, 1509-6, 1508-6	4007-6, 4010-6, 4013-6
-202	1 1/8	1503-10, 1509-8, 1508-8, FC300-10, FC350-10, FC321-10	4013-8
-203	1 1/8	2807-12	1206-12
-204	1 1/4	1503-12, 1509-10, FC300-12, FC350-12	1210-12, 4010-10
-205	1 3/8	2807-16	1212-16, FC3214-16
-206	1 7/16	1503-16, FC300-16, FC350-16, FC321-16	1212-16
-207	1 1/2	FC136-12, 1508-12	4007-12, 4013-12
-208	1 5/8		FC3214-20
-209	1 3/4	1503-20, FC300-20, FC350-20	1212-20

FT1033 Assembly mandrels

The FT1033 assembly mandrels are exclusively designed for use with the FT1028 assembly machine. Secured in the chuck they speed the volume production of Aeroquip three piece reusable hose fittings.

Part Number	Fitting Number	Part Number	Fitting Number
FT1033-1	FC9215-0404	FT1033-23	401-6
FT1033-2	FC9215-0504	FT1033-24	411-6
FT1033-3	FC9215-0808	FT1033-25	411-8
FT1033-4	FC9215-0506	FT1033-26	401-8
FT1033-5	FC9215-1010	FT1033-27	411-10
FT1033-6	FC9210-0606	FT1033-28	401-10
FT1033-7	FC9210-1212	FT1033-29	411-12
FT1033-8	FC9211-0606	FT1033-30	406-16
FT1033-9	FC9211-1212	FT1033-31	411-16
FT1033-10	FC9211-1616	FT1033-32	406-20
FT1033-11	FC9211-2020	FT1033-33	411-20
FT1033-13	FC9212-0204	FT1033-34	406-24
	FC9212-0404	FT1033-35	411-24
	FC9216-0404	FT1033-36	411-32
FT1033-14	FC9212-0406	FT1033-37	412-2-4
	FC9212-0606	FT1033-38	412-4-4
FT1033-15	FC9212-0608	FT1033-39	412-4-5
FT1033-16	FC9212-0810	FT1033-40	412-4-6
FT1033-17	FC9212-1212	FT1033-41	412-6-12
FT1033-18	FC9212-1616	FT1033-42	412-8-10
FT1033-19	FC9212-2020		412-12-10
FT1033-21	411-4 401-4		
FT1033-22	411-5 401-5		

FT1271 Split flange assembly tooling

Specifications

The Aeroquip designed FT1271 split flange tooling is specifically designed for the FT1028 assembly machine. This tooling makes it easier to secure split flange hose fitting nipples in the chuck of the assembly machine.



FT1220-10 Reusable fitting assembly mandrels



Specifications

The FT1220-10 kit includes all assembly mandrels listed for -4 through -20 for the assembly of Aeroquip 411, 401, and 406 reusable hose fittings. Individual mandrels may also be ordered by using the part numbers to the right.

FT1095 Elbow reusable fitting holders

Specifications

The optional FT1095 elbow fitting holders will allow the operator to make double elbow hose assemblies on the FT1097 assembly machine and can be used with the FT1028 machine.

Ordering Instructions

Part Number	Nipple Hex Size	For Use With Nipples Marked	Adapter Required For FT1028 Machine
FT1095-100-1	3/8	MP-4	
FT1095-100-2	7/16	MP-5	
FT1095-100-3	1/2	MP-6, HP-4	
FT1095-100-4	5/8	MP-8, HP-6	
FT1095-150-1	11/16	HP-8	
FT1095-150-2	3/4	MP-10	
FT1095-150-3	7/8	MP-12	
FT1095-150-4	15/16	HP-12	
FT1095-150-5	1 1/8	MP-16	
FT1095-150-6	1 1/4	HP-16	
FT1095-150-7	13/16	HP-10	
FT1095-200-1	1 3/8	MP-20	
FT1095-200-2	1 5/8	HP-20	

Thread type	SAE 37° (JIC)	SAE 45°	PTT 30°
Use with fitting Nos.	411	401	406
Dash size			
-4	1582-4S	1582-4S	
-5	1582-5S	1582-5S	
-6	583-6S	1582-6S	
-8	1582-8S	1582-8S	
-10	1582-10S	1582-10S	
-12	583-12S	1582-12S	
-16	1563-16S		1561-16S
-20	1563-20S		1561-20S
-24	1563-24S		1561-24S
-32	1563-32S		

Kit Part Number	Fitting Part Number	Thread Types	Size Range
1562 (not shown)	401, 406, 411, 412	SAE 45°, SAE 37° (JIC), PTT, NPTF	-4 through -32
1597 (not shown)	401, 412	SAE 45°, NPTF	-4 through -12
1598 (not shown)	411, 412	SAE 37° (JIC), NPTF	-4 through -32
1599 (not shown)	411, 412	SAE 37° (JIC), NPTF	-4 through -12
FT1220-10 (not shown)	401, 406, 411, 412	SAE 45°, SAE 37° (JIC), PTT, NPTF	-4 through -20

**F2015
SOCKETLESS™ fitting bench mounted assembly machine****Hose Specifications**

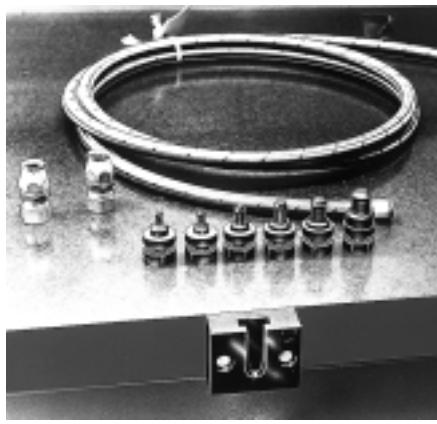
- SOCKETLESS® hose, all sizes

Ordering Instructions

F2015 Complete machine

Features

- Fast, hand assembly
- Bench mounted
- Hose is securely held
- Mandrels included

**FT1081
PTFE hose assembly tool kit****Hose Specifications**

Smooth Bore PTFE Hose, -03, -04, -05, -06, -08, -10 and -12 hose. FT1090-3-10-4 and FT1090-3-10-5 are useful wire flare tools to use in conjunction with kit FT1081.

Ordering Instructions

FT1081 Complete tool kit. Includes:
FT1081-3-1 mandrel holder
FT1081-3-2-3 mandrel -3 hose
FT1081-3-2-4 mandrel -4 hose
FT1081-3-3-5 mandrel -5 hose
FT1081-3-4-6 mandrel -6 hose
FT1081-3-5-8 mandrel -8 hose
FT1081-3-6-10 mandrel -10 hose
FT1081-3-7-12 mandrel -12 hose

Features

- Inexpensive
- Easy to use
- Seats PTFE tube against sleeve

**FT1038A
PTFE hose tool****Hose Specifications**

- Smooth bore PTFE Hose, -03, -04, -05, -06, -08, -10 and -12

Features

- Small
- Hand held tool



FT1258 Cut off tool

Specifications

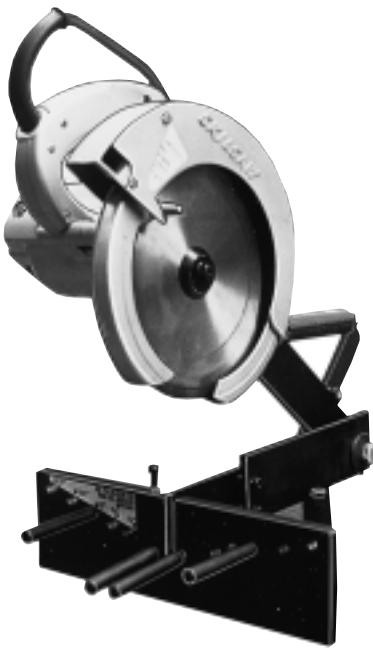
FT1258 bench mounted cut off tool. A bench mounted cutter for in-plant production of Polyon™ hose assemblies and other fabric reinforced hose styles.

Ordering Instructions

FT1258 Cut off tool

FT1258-2-2 Blade kit

Package of three replacement blades for FT1258 tool which are designed to cut all fabric reinforced hose including Kevlar.*



FT1200 Hose cut off machine

Hose Specifications

- Textile Reinforced, $\frac{1}{4}$ " to 2" I.D.
- Single Wire Braid Reinforced, $\frac{1}{4}$ " to $1\frac{1}{4}$ " I.D.
- Double Wire Braid Reinforced, $\frac{1}{4}$ " to 1" I.D.
- Spiral Wire Reinforced, $\frac{1}{4}$ " to $\frac{3}{4}$ " I.D.

Features

- Low cost
- Compact
- Bench mounted
- Easy to operate
- Built in safety features
- U.L. listed

Ordering Instructions

Machine:

FT1200 Includes machine with 8" knife blade

Replacement Components:

FT1200-3-84245 Replacement 8" knife blade

Electrical Requirements

2 $\frac{1}{2}$ hp electric motor. 115V AC single phase, 50-60 Hz, 5200 rpm

*Kevlar is a DuPont trademark.



FT1023 Hose cut off machine

Hose Specifications

- Fabric and Wire Reinforced, $\frac{1}{4}$ " to 1" I.D.

Features

- Low cost
- Compact, 21" x 16" x 24", 104 lbs.
- Speeds production
- Easy to operate
- Square cuts, no frayed ends
- Full safety features
- Heavy duty construction

Ordering Instructions

Machine:

FT1023 Includes machine with 7" blade

Replacement Components:

FT1023-3-20C V-belt for model "C"

FT1023-3-40 Replacement blade

Electrical Requirements

2 hp electric motor, 230V AC, single phase, 60 Hz, 3450 rpm



FT1328 Hose cut off machine

Hose Specifications

- Fabric Reinforced, $\frac{1}{4}$ " to 2" I.D.
- Wire Braid Reinforced, $\frac{1}{4}$ " to 2" I.D.
- Spiral Wire Reinforced, $\frac{1}{4}$ " to 2" I.D.

Features

- Compact
- Easy to operate
- Easily bench mounted
- Built in safety features
- 14" heavy duty abrasive wheel
- Hose bore cleaning brushes included
- U.L. listed
- Low cost

Ordering Instructions

Machine:

FT1328 Includes machine with 14" wheel, hose base plate and vise, cleaning brushes and spanner wrench

Replacement Components:

FT1328-4993-6220 Replacement 12" abrasive wheel (Model 6165)

FT1328-4993-6230 Replacement 14" abrasive wheel (Model 6170)

FT1238-* Replacement hose I.D. cleaning brushes

*Use Hose dash size -08, -12, -16, -20, -24, -32

Electrical Requirements

115V, 15 amps, single phase, AC, 50-60 Hz



S1104 Hose cut off machine

Hose Specifications

- Single and Double Wire Reinforced, $\frac{1}{4}$ " to 3" I.D.
- Four and Six Spiral Wire Reinforced, $\frac{1}{4}$ " to $1\frac{1}{2}$ " I.D. with optional blades FT1101-1 and FT1101-2, spiral wire capacity is increased to 2"

Features

- Compact, 22" x 24"
- Light, 130 lbs.
- Dual V-belt drive
- 10" cutting blade
- U.L. listed

Electrical Requirements

3 hp, 230/460V, 3 phase, 60 Hz.

Machine wired for 230V AC. Change connections as shown on motor plate for 460V. Also, replace 230V motor heater with 460V motor heater included with machine.

Ordering Instructions

Machine:

S1104 Basic machine, 230/460V, 3 phase, 60 Hz

S1026 Hose measuring gauge attachment

FT1215 Hose reel attachment

S1118 Coolant spray system (required when cutting spiral wire hose)

SC1709 10" Replacement cutting blade

SC1772 Welded steel table

*A 3 hp, 230V AC, single phase machine is also available but not recommended because of reduced torque and less capability when cutting larger size hose. Order by part number S1104-230.

Optional Cutting Blades

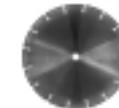
FT1101-1

10" Scalloped Blade



FT1101-2

10" Abrasive Blade



FT1260 Hose cut off machine

Hose Specifications

- All Hose Constructions – $\frac{1}{4}$ " to 4" I.D.

Features

- Built in safety features
- Easy to operate
- 16" abrasive wheel
- Heavy duty design
- Low maintenance
- V shaped vise
- U.L. listed

Ordering Instructions

Machine:

FT1260-1-1 Base machine with stand. 230/460V, 3 phase, 60 Hz

FT1260-1-2 Base machine with stand and fume exhauster. 230/460V, 3 phase 60 Hz

FT1260-1-3 Base machine with stand. 230V, single phase, 60 Hz

FT1260-1-4 Base machine with stand and fume exhauster. 230V, single phase, 60 Hz

FT1260-2-5 Optional hood (can be used only with the -1-2 and the -1-4 models)

Aeroquip recommends the use of FT1260-2-5, optional hood.

Replacement Components:

FT1260-3-1 Replacement 16" fiber-glass reinforced abrasive wheel

Electrical Requirements

Electrical requirements will vary depending on options selected.

Contact Eaton Aeroquip for additional information.



S1120 Hose preparation package

Hose Specifications

Cutting $\frac{3}{16}$ " to 3"
Skiving $\frac{1}{4}$ " to 2"

Features

- Fast, efficient hose cutting
- 10" cutting blade
- Easily adjusted, self-contained skiving mandrels for reusable fittings
- Safe collection of skived rubber
- Spray system prolongs blade life
- Rotary hose reel for easy hose handling
- 24" x 42" x 24", 240 lbs.
- Double V belt cutting drive
- Direct skiving drive

Electrical Requirements

3 hp (in S1102 machine saw), $\frac{1}{3}$ hp (in dust collector), 230/460V AC, 60 Hz, 3 phase

Blade Selection

Eaton Aeroquip offers three different cutting blades to make cutting of wire braid and spiral wire hose quick and easy.

Ordering Instructions

The S1120 hose preparation package may be ordered as a complete assembly or the five different components of the package may be ordered individually.

S1120*	Hose Preparation Package
S1102*	Includes: Basic Cut Off and Skiving Machine
S1043*	Dust Collector and Table
S1026	Hose Measuring Gauge Attachment
FT1215	Hose Reel Attachment
S1118	Coolant Spray System
SC1681	(Optional) Replacement Skiving Brush

*A 3 hp 230V AC single phase motor is also available but not recommended due to reduced torque and less capability in cutting larger size hose. The following part numbers must be used when ordering components with single phase motors:

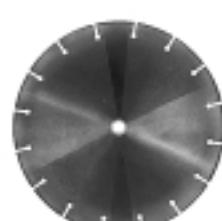
S1120-230	Hose Preparation Package
S1102-230	Basic Cut Off and Skiving Machine
S1043-230	Dust Collector and Table



SC1709
Standard replacement cutting blade (one included with each machine)

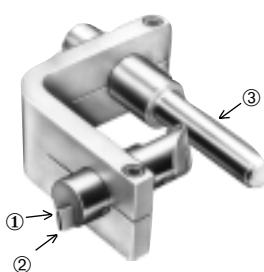


FT1101-1
Scalloped cutting blade (optional; used for cutting spiral wire hose).

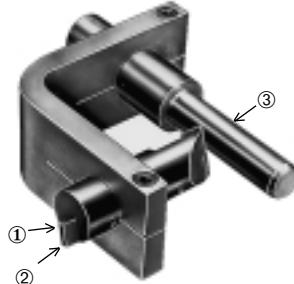


FT1101-2
Abrasive cutting blade (optional; used for cutting spiral wire hose).

Skiving Tools



FT1229-Size
Silver Chromate Mandrel
(for reusable fittings)
 ① FT1229-2-3 blade holder
 ② FT1229-3-4 skive blade
 ③ FT1229-100-size



FT1230-Size
Yellow Chromate
Mandrel (for crimp
fittings)
 ① FT1229-2-3 blade holder
 ② FT1229-3-4 skive blade
 ③ FT1230-100-size



FT1231-Size
Black Oxide Mandrel
(for internal skive crimp fittings)

For skiving rubber covered wire reinforced hoses

When selecting skive tools, refer to Aeroquip Bulletin JA55 for proper skive length of hose sizes.

Hose Size	Reusable Fittings		Crimp Fittings		Crimp Internal Skive Fittings	
	FT1229	Skive Length	FT1230	Skive Length	FT1231	Skive Length
-03			-3	.45		
-04	-4	.91	-4	.76		
-05			-5	.76		
-06	-6	1.15 1.23 1.30	-6	.90		
-08	-8	1.25	-8	1.04	-8	1.34
-10	-10	1.25	-10	1.11		
-12	-12	1.40	-12 ¹	1.21 1.31	-12	1.40
-12B ³	2.40					
-16	-16 -16B ³	1.65 2.30	-16	1.30	-16	1.85
-20	-20 -20A ⁴ -20B ³	2.09 2.60 2.75	-20 ¹	1.66 1.52 1.88	-20	2.05
-24	-24 -24B ⁵	1.95 2.60	-24 ¹	1.74 1.64 2.18	-24	2.05
-32	-32 ²	2.05			-32	2.30

¹Adjustable tool.

²FT1229-32 tool is used for reusable and crimp fittings.

³For FC606.

⁴For FC136.

⁵For FC136 and FC254.

FT1240 Internal skive tooling



FT1240-100-Size



FT1240-150-Size

Internal Skive Tool	FC136	FC254	FC273	FC323 FC324 FC325	FC606
FT1240-150-8		-08			
FT1240-100-12		-12		-12	
FT1240-150-12	-16	-16	-16	-16	-16
FT1240-150-16					
FT1240-100-20	-20		-20	-20	
FT1240-150-20	-24	-20	-24	-24	
FT1240-100-24		-24			
FT1240-150-24					
FT1240-100-32	-32		-32	-32	
FT1240-150-32		-32			

FT1279 Auger attachment

The FT1279 auger attachment permits efficient skiving of rubber covered wire reinforced hose.



Designed for use with FT1229, FT1230 and FT1231 skiving tools, the FT1279 auger attachment promotes quick completion of hand skiving operations.

FT1312
Hose proof
test stand**Hose Specifications**

Assemblies up to 2" I.D., 6 spiral wire

Features

- Designed to use tap water, eliminating the need for a special test fluid
- Compact power unit is air driven
- Air regulator and gauge provide easy pressure adjustment and monitoring
- Tough transparent Lexan* lid
- 79" x 36" x 53", 550 lbs.

Power Unit

The power unit of the FT1312 tester is a compact, economical air driven hydraulic pump. It will provide sufficient hydraulic pressure to proof test any Aeroquip hose assembly, up to 22,000 psi.

*Lexan is a General Electric trademark.

FT1261
Hose proof
test stand**Hose Specifications**

Assemblies up to 2" I.D., 6 spiral wire in 50 ft. coil lengths

Features

- Designed to use tap water, eliminating the need for a special test fluid
- Air regulator and gauge provide easy pressure adjustment and monitoring
- Tough transparent Lexan* lid
- 96" x 84" x 54", 800 lbs.

Power Unit

The power unit of the FT1261 tester is a compact, economical air driven hydraulic pump. It will provide sufficient hydraulic pressure to proof test any Aeroquip hose assembly, up to 22,000 psi.

*Lexan is a General Electric trademark.

FT1312 and FT1261
Standard adapter selection chart

Hose Fitting* Style and Size	Fitting Adapter Part Number	Pressure Port Adapter Part Number	Plug or Cap Part Number
SAE 37° (JIC) Swivel			
-4	2027-8-4S	**	900599-4
-5	2021-6-5S	2081-12-6S	900599-5
-6	2027-8-6S	**	900599-6
-8	2027-8-8S	**	900599-8
-10	2027-10-8S	**	900599-10
-12	2027-8-12S	**	900599-12
-16	2021-12-16S	**	900599-16
-20	2021-16-20S	2040-12-16S	900599-20
-24	2021-16-24S	2040-12-16S	900599-24
-32	2021-16-32S	2040-12-16S	900599-32
SAE 45° Swivel			
-4	2000-6-4B	2081-12-6S	900599-4
-5	2000-6-5B	2081-12-6S	900599-5
-6	2000-6-6B	2081-12-6S	2001-6-6B, 2082-6S
-8	2000-12-8B	**	900599-8
-10	2000-12-10B	**	900599-10
-12	2000-12-12B	**	2001-8-12B, 2082-8S
Male Pipe			
-2	2081-8-2S	2081-12-8S	2046-2-2S, 2082-2S
-4	2081-8-4S	2081-12-8S	2046-4-4S, 2082-4S
-6	2081-8-6S	2081-12-8S	2046-6-6S, 2082-6S
-8	2081-8-8S	**	2046-8-8S, 2082-8S
-12		**	2046-12-12S, 2082-12S
-16	2040-12-16S	**	2046-16-16S, 2082-16S
-20	2040-16-20S	2040-12-16S	2046-20-20S, 2082-20S
-24	2040-20-24S	2040-12-16S, 2040-16-20S	2046-24-24S, 2082-24S
-32	2040-24-32S	2040-12-16S, 2040-16-20S, 2040-20-24S	2046-32-32S, 2082-32S

*Two adapters are required per hose assembly to be tested.

**Internal Skive Fittings Only.



FT1058 Hose proof test stand

Features

- Pressure gauge
- Release valve
- Hand hydraulic pump
- Foot switch
- Fluid reservoir, use SAE 5 wt. hydraulic oil (oil not included)
- Electric fluid pump
- Safety lid
- Pressure port (3/4"-14 NPTF Female Port)
- 42" x 22" x 9" (41" with legs), 75 lbs.
- 10,000 psi maximum proof pressure

Electrical Requirements

110V 60 Hz, single phase motor

Ordering Instructions

FT1058 as shown above. Legs can be removed for bench mounting.

FT1058 Adapter selection chart

Hose Fitting* Style and Size	Fitting Adapter Part Number	Pressure Port Adapter Part Number	Plug or Cap Part Number
SAE 37° (JIC) Swivel			
-4	2021-6-4S	2081-12-6S	900599-4
-5	2021-6-5S	2081-12-6S	900599-5
-6	2021-12-6S		900599-6
-8	2021-12-8S		900599-8
-10	2021-12-10S		900599-10
-12	2021-12-12S		900599-12
-16	2021-12-16S		900599-16
-20	2021-16-20S	2040-12-16S	900599-20
-24	2021-16-24S	2040-12-16S	900599-24
-32	2021-16-32S	2040-12-16S	900599-32
SAE 45° Swivel			
-4	2000-6-4B	2081-12-6S	900599-4
-5	2000-6-5B	2081-12-6S	900599-5
-6	2000-6-6B	2081-12-6S	2001-6-6B, 2082-6S
-8	2000-12-8B		900599-8
-10	2000-12-10B		900599-10
-12	2000-12-12B		2001-8-12B, 2082-8S
Male Pipe			
-2	2081-8-2S	2081-12-8S	2046-1-2S, 2082-2S
-4	2081-8-4S	2081-12-8S	2046-4-4S, 2082-4S
-6	2081-8-6S	2081-12-8S	2046-6-6S, 2082-6S
-8	2081-12-8S		2046-8-8S, 2082-8S
-12			2046-12-12S, 2082-12S
-16	2040-12-16S		2046-16-16S, 2082-16S
-20	2040-16-20S	2040-12-16S	2046-20-20S, 2082-20S
-24	2040-20-24S	2040-12-16S, 2040-16-20S	2046-24-24S, 2082-24S
-32	2040-24-32S	2040-12-16S, 2040-16-20S, 2040-20-24S	2046-32-32S, 2082-32S

*Adapters are available for other hose fitting styles. Contact Eaton Aeroquip.