

Crimp Data and Dies

For: Power Crimp® 707
MobileCrimp® 4-20
Power Crimp® 3000B
OmniCrimp® 21
Power Crimp® 2001



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Hose Assembly Guide

Once the proper hose and couplings have been selected, the assembly can now be made. There are three types of assemblies:

- Permanent crimped
- Permanent swage
- "Field Attachable" couplings
(No crimping equipment needed)

Components, equipment and procedures vary for each type of couplings. However, measuring, cutting procedures and fitting orientation are the same.

1. Measuring Hose

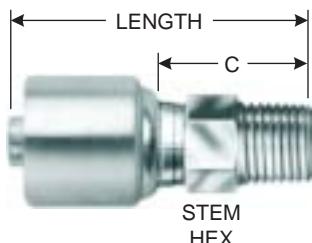
With some assemblies, the length must be within a tight tolerance for proper installation. This is especially true for short high-pressure hose assemblies.

Before cutting the hose, make sure you understand the difference between "cut hose length" and "assembly overall length" as shown below.

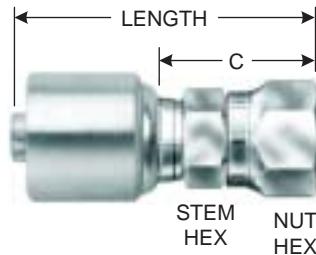
Cut-off value "C" is the length of that part of the coupling not directly in contact with or applied to the hose. Subtract the sum of the two "C" values from the overall length of the assembly to determine the approximate hose length to be cut.

All cut-off values are identified in the coupling tables found in the Gates hydraulic catalog.

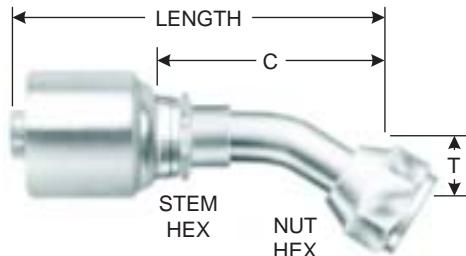
For male thread couplings, the cut-off is measured from the locking collar to the end of the threads as shown.



For straight female couplings, the cut-off is measured from the locking collar to either the end of the nut or seat depending on whether the nut can be pulled back exposing the seating surface as shown.

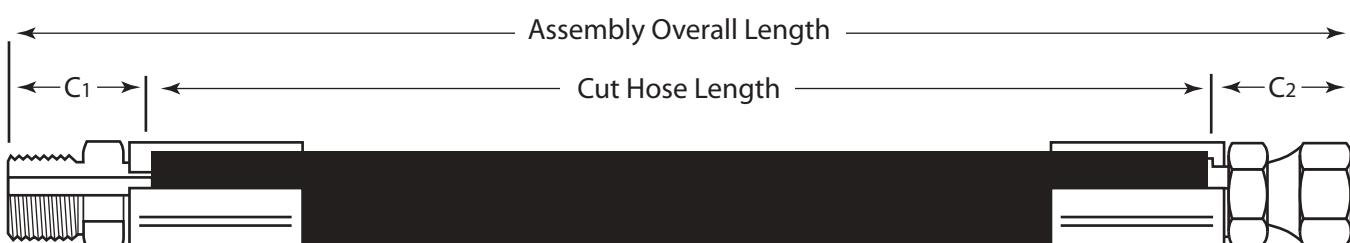


Bent tube couplings are measured to the center line of the seating surface as shown.



SAE Length Tolerances for Hydraulic Hose Assemblies and Specified Hose Lengths.

Length	Tolerance
For lengths from 0" up to and including 12"	$\pm 1/8$
For lengths from 12" up to and including 18"	$\pm 3/16$
For lengths from 18" up to and including 36"	$\pm 1/4$
For lengths from 36"	$\pm 1\%$ of Length measured to the nearest $1/8"$



$$\text{Cut Hose Length} = \text{Assembly Overall Length} - (C_1 + C_2)$$

2. Cutting Hose

CAUTION: When cutting hose, always wear safety glasses and avoid loose fitting clothing. Hearing protection is also strongly recommended.

After determining the hose cut length by deducting for fittings, cut the hose with a cut-off saw. There are two blade types that can be used: notched (serrated) or abrasive.

The notched blade gives a clean, efficient cut on non-spiral-reinforced hose (one- and two-wire braid hose and textile hose). Though notched blades will cut spiral hose, they are not recommended as they dull quickly and/or become damaged.

The abrasive wheel efficiently cuts all hose types, including spiral-reinforced hose. The drawback with this blade is the amount of debris it creates from cutting. As the blade wears out, its diameter becomes smaller and eventually requires replacement.

Once you've installed the appropriate blade, place the hose in the bending fixture. This draws the hose away as you cut, minimizing binding (squeezing) and makes cutting easier. Hand-held cutters can be used on some textile-reinforced hose.

Cutting Teflon hose requires special consideration. It can be cut cleanly with a cutting shear. Once the cut is made the Teflon tube must be deburred using a sharp knife.

Grounding Industrial hoses: When flammable materials are conveyed, follow these steps for grounding the static wire or wire helix to the couplings:

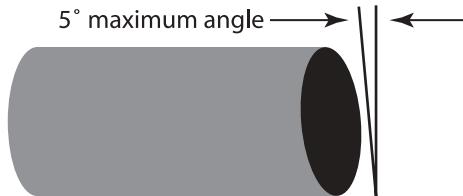
EXPOSING THE STATIC WIRE METHOD: Locate the static wire(s) in the end of the hose. If the wire(s) is not exposed, probe for it with a knife by cutting away a small part of the hose. When the wire(s) is located, note the direction that it is wound and cut the hose material away until approximately $5/8"$ ($\pm 1/8"$) is exposed. Without damaging the wire(s), cut the hose end square. Check the electrical continuity of each static wire. When a satisfactory electrical test is achieved, bend the static wire(s) to the inside of the hose tube so that it will be in direct contact with the coupling shank (stem) and attach the coupling. Finally, check the electrical continuity after the couplings have been attached. The helical wire can be grounded in a similar fashion.

STAPLE METHOD: A metal staple(s) or flat brass pin(s) should be inserted into the center of the static wire(s) approximately $1/4"$. Remember that the static wire(s) travels at an angle due to the "Lazy Helix". Check the electrical continuity of each static wire. When a satisfactory electrical test is achieved, bend the remaining end(s) of the staple(s) or pin(s) inside of the hose tube so that it will be in direct contact with the coupling shank (stem) and attach the coupling. Finally, check the electrical continuity after the couplings have been attached. The helical wire can be grounded in a similar fashion.

It is recommended that both static wires at each end of the hose be grounded by the methods described above. A minimum of one static wire (or wire helix) on each coupling must be grounded to achieve dissipation of static electricity.

NOTE: Cutting of any hose will generate some debris that if not properly removed can damage your hydraulic system.

When cutting any hose, keep the cut as straight as possible and square with the side of the hose. The maximum allowable angle of the cut is 5° (as shown below).



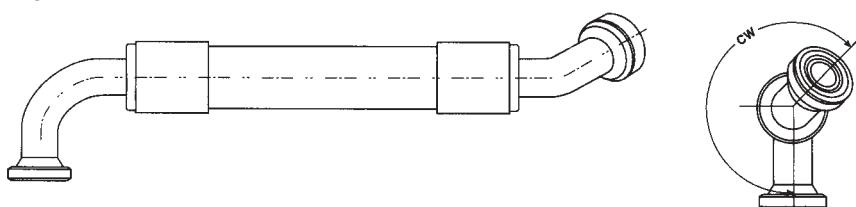
3. Fitting Orientation

Fitting orientation is necessary when neither fitting is straight (both are at an angle). Fittings must be oriented to each other to ensure proper installation with minimal stress on the hose from twisting.

Orientation procedure:

- Position far coupling vertically downward.
- Orientation angle is measured clockwise (as shown).

(Orientation angle tolerance should be $\pm 2^{\circ}$.)



Hose Assembly Guide (Cont'd)



Skived Hose



Photo 1



Photo 2



Photo 3

4. Hose Preparation

Skiving

CAUTION: When skiving or buffing hose, always wear safety glasses and avoid loose fitting clothing. If power skiving or buffing, hearing protection is recommended.

Skiving removes the hose cover down to the reinforcement for coupling assembly and/or ferrule crimping. Some tools that can be used to skive are:

- Wire abrasion wheel.
- Hand-skiving tool
(Gates Part No. 78030/ Product Number 7480-0413).

Thick-covered and some 6-wire hoses typically require skiving because the ferrule serrations cannot bite through the cover and into the wire. Hoses with a thin cover do not typically require skiving. Check Gates hydraulic catalog and crimp chart for specific information on skive length and diameter.

The skive length is the length of cover removed. For example, for 24G5K, the skive length is 2.75" and the skive diameter is "to the wire".

Buffing

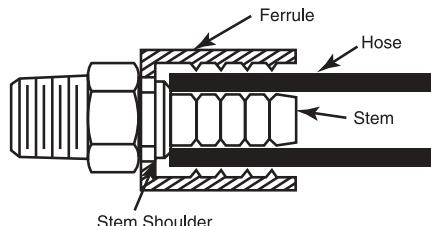
Some non-wire-reinforced hose require buffing, which is similar to skiving but doesn't require removing the hose cover to the reinforcement.

When a hose is buffed, its cover is removed, but only to a specific diameter as defined by crimp data. A grinding wheel is necessary to buff a hose (not a wire wheel, which could damage the reinforcement).

NOTE: Skiving or buffing of any hose will generate some debris that if not properly removed can damage your hydraulic system.

5. Preassembly Using Two-Piece Fittings (GS, PCM, PCS & PC)

1. Lubricate the first two or three serrations on the stem with light-weight oil, i.e., 10W motor oil.
2. Clamp stem in vise on hex portion. Put ferrule over hose and push hose onto stem shoulder. (Photo 1 & 2)
3. Cutaway of assembly below shows the hose has bottomed against stem shoulder. To check for full insertion, pull the ferrule down. The stem shoulder should be level with the top of the ferrule.
4. Push ferrule so it rests against hex of stem. Hose and coupling are now ready for crimping. (Photo 3)



Hose Assembly Guide (Cont'd)

6. Preassembly Using MegaCrimp® Fittings (One Piece)

MegaCrimp was designed for easy insertion. No oil is needed for lubrication.

1. Place the hose next to the coupling. Use your thumb or mark the depth of insertion.
2. With your thumb (or mark) in place, push the coupling until the shell touches the tip of your thumb or the mark. Twist it slightly to ensure it is fully inserted.



MegaCrimp® Coupling (One-Piece)

7. Crimp Length

When crimping to a full length, Diagram A, place the top of the ferrule $1/8"$ below the top of the die fingers.

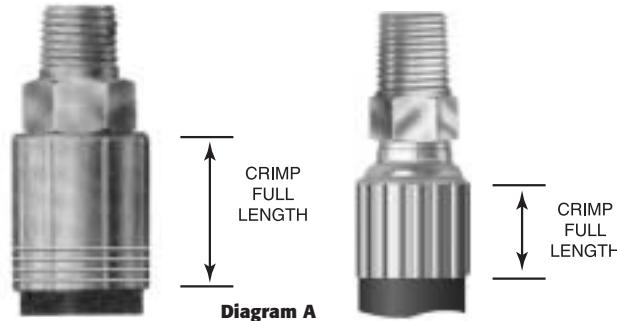


Diagram A

When crimping to a specified crimp length, Diagram B, measure and mark the ferrule for the correct length. Place the mark $1/8"$ below the top of the die fingers.

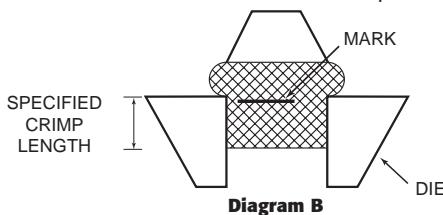


Diagram B

IMPORTANT SAFETY NOTE:

All settings are approximate! Machining tolerances exist for each crimper, die set and supporting piece of equipment which will affect your actual setting. Always check the crimp diameter to ensure that it is within the published limits. Record your actual crimper setting to achieve the specified crimp diameter for future use. Failure to heed this message could result in improperly made assemblies, blowing the hose out of the fittings at high pressure, and risk of fire and/or serious injury.

8. Crimp Procedures

NOTE: For specific instructions for your crimper, please refer to the appropriate operator's manual.

Listed below are basic crimp procedures.

1. Refer to crimp data chart for
 - a. Skive data (if necessary)
 - b. Die selection
 - c. Finished crimp diameter
 - d. Approximate crimp setting
2. Load the selected dies into the crimper. When using a die set for the first time, apply a thin coat of Molykote G lubricant to the contact surface and cone (not the bore of the die). This layer of lubricant must be thinly re-applied when contact surfaces become shiny. Locate dies in crimp position.
3. Adjust the machine to the proper crimp setting.
4. Insert the assembly and locate with the die fingers. (Approximately $1/8"$ below top of die. You do not want a "mushroom effect" on top of coupling.)
5. Install die cone if used.
6. Always wear safety glasses and **KEEP HANDS AWAY FROM MOVING PARTS.**



Incorrect

Correct

7. Activate crimp mechanism. Support hose by holding it under crimper base.
8. Remove assembly from dies and measure crimp diameter.

Hose Assembly Guide (Cont'd)

9. Measuring Crimp Diameter (When using 21 and 22 Dies)

1. Using Gates "21/22" dial calipers (Product No. 7369-1320, Part No. 78217) measure halfway between the ridges (Fig. 1). To be sure crimp diameter is being properly measured, mark a crimp flat. Beginning with that flat, count 9 flats to get the diameter. Be sure caliper blades DO NOT touch ridges.

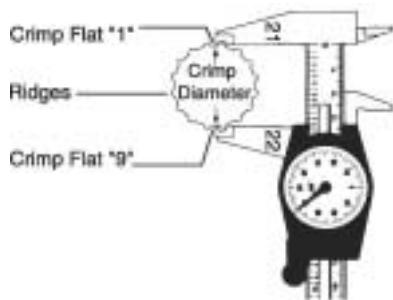


Fig. 1

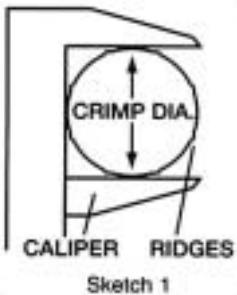
2. Measure halfway between the ends of crimped portion of the ferrule (Fig. 2)



Fig. 2

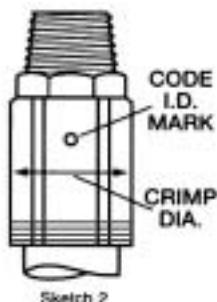
Measuring Crimp Diameter (When NOT using 21 and 22 Dies)

1. Measure halfway between the ridges, and center the ferrule in the caliper jaws (Sketch 1). When using caliper, be sure caliper fingers do not touch ridges or part number stamp.



Sketch 1

2. Measure halfway down the crimped portion of the ferrule. Be sure caliper blades DO NOT touch ridges. (Sketch 2)



Sketch 2

When measuring small crimp diameters (1/4" and 3/8"), use Gates dial calipers (Product No. 7369-0320, Part No. 78215) which are notched to clear ridges (See Photo 1).



10. Adjustment Procedures

Should the actual crimp diameter NOT be within the tolerance specified in the Crimp Data Charts, check the calibration of the crimper. If the calibration is correct, a slight adjustment of the digital readout may be necessary.

REMEMBER: The Digital Readout Settings listed in this manual are Approximate! Machining tolerances exist for each crimper, die set, and supporting piece of equipment, which will affect your actual setting.

ALWAYS check the crimp diameter to assure it is within the published specifications!

To find the right adjustment to your digital setting, refer to your specific crimper section or your crimper's Operating Manual. When the setting has been calculated and your new crimp is within the specified tolerance, make sure to record your new Approximate Setting in the space provided in this manual under "User's Actual Setting" for future reference.

WARNING:

An incorrect hose assembly can rupture or blow apart in use, resulting in serious injury, death or property damage.

FOR SAFETY'S SAKE, USE A CRIMPER ONLY IF YOU:

1. Receive hands-on TRAINING with Gates crimper and assemblies.
2. Follow current GATES OPERATING MANUAL and CRIMP DATA for the Gates crimper.
3. Use only NEW (UNUSED) GATES hose and fittings.
4. Use SAFETY GLASSES.

REMEMBER: Others depend on you to make correct assemblies.

Hose Assembly Guide (Cont'd)

General

Power Crimp® 707

MobileCrimp® 4-20

OmniCrimp® 21 / Power Crimp® 3000B

11. Permanent Swage Procedures For PCTS Thermoplastic C7S and C8S Hoses.

Mark hose for proper insertion depth into coupling. See Gates Hose Swage Data chart following for insertion depth. Use a lightweight oil to lubricate the inside diameter of hose. Place the coupling hex into a vise and insert hose to insertion depth.

The following are the basic swage procedures. For specific instructions for your crimper or swager, please refer to the appropriate operator's manual. Swaging can be accomplished with either the Gates HS-1 Hand Swager (Part No. 78080/ Product No. 7483-1000) or with the Swager Conversion Kit for the Power Crimp® 707 (Part No. 78081/ Product No. 7480-0040).

1. See Swage Data chart to select specific pusher and die for each coupling and hose combination to be swaged. The SwageTooling page following contains specific part/product number information for each pusher and die.
2. Insert the correct die and pusher into the swaging machine.
3. Lubricate inner bore surfaces of dies with a thin film of lightweight oil.
4. Feed hose assembly through the dies and hold hose and coupling into the pusher. Start the swage.
5. Swage is complete when pusher bottoms out on dies.



Gates HS-1

Part No. 78080
Product No. 7483-1000



Swager Conversion Kit for the Power Crimp® 707 Crimper

Part No. 78081
Product No. 7480-0040

Swage Tooling

Pushers and Dies for PCTS Couplings and C7S & C8S Hose

PCTS Swage Pushers

Description	Part No.	Product No.
GM001	78100	7483-0308
GM002	78101	7483-0309
GM003	78102	7483-0310
GM004	78103	7483-0311
GM005	78104	7483-0312
GM006	78155	7483-0367
GM007	78149	7483-0356
GM008	78150	7483-0357
GM009	78105	7483-0313
GM010	78106	7483-0314
GM011	78107	7483-0315
GM012	78108	7483-0316
GM013	78109	7483-0317
GM023	78111	7483-0319
GM062	78152	7483-0363
GF002	78144	7483-0358
GF005	78148	7483-0355

PCTS Swage Pushers (cont.)

Description	Part No.	Product No.
GF006	78125	7483-0333
GF008	78126	7483-0334
GF009	78127	7483-0335
GF010	78151	7483-0362
GF011	78128	7483-0336
GF012	78129	7483-0337
GF013	78130	7483-0338
GF014	78131	7483-0339
GF015	78132	7483-0340
GF016	78133	7483-0341
GF017	78147	7483-0361
GT204	78138	7483-0346
GT205	78139	7483-0347
GT206	78153	7483-0364
GT308	78154	7483-0366
GT310	78156	7483-0368
GT312	78143	7483-0351

PCTS Swage Dies

Description	Part No.	Product No.
G302	78090	7483-0300
G303	78091	7483-0301
G304	78092	7483-0302
G305	78093	7483-0303
G306	78094	7483-0304
G308	78095	7483-0305
G312	78096	7483-0306
G316	78097	7483-0307

GM = Male Pusher

GF = Female Pusher

GT = Tube Pusher

(Con't on next column)

Pushers and Dies for C14 Teflon* Hose and Couplings

C14 Hose Insertion Dies

Description	Part No.	Product No.
HD-4C14	78521	7483-0503
HD-5C14	78522	7483-0504
HD-6C14	78523	7483-0505
HD-8C14	78524	7483-0506
HD-10C14	78525	7483-0507
HD-12C14	78526	7483-0508
HD-16C14	78527	7483-0509

C14 Swage Pushers

Description	Part No.	Product No.
P-C14-4FJSX	78500	7483-0536
P-C14-5FJSX	78501	7483-0537
P-C14-6FJX	78502	7483-0538
P-C14-6FSX	78503	7483-0539
P-C14-8FJSX	78504	7483-0540
P-C14-10FJSX	78505	7483-0541
P-C14-12FJX	78506	7483-0542
P-C14-12FSX	78507	7483-0543
P-C14-16FJSX	78508	7483-0540
P-C14-2MP	78510	7483-0550
P-C14-4MP	78511	7483-0545
P-C14-6MP	78512	7483-0546
P-C14-8MP-8 & 10ABC	78513	7483-0547
P-C14-12MP-12ABC	78514	7483-0548
P-C14-16MP	78515	7483-0549
P-C14-4TUBE	78548	7483-0530
P-C14-5TUBE	78549	7483-0531
P-C14-6TUBE	78550	7483-0532
P-C14-8TUBE	78551	7483-0533
P-C14-10TUBE	78552	7483-0534
P-C14-12TUBE	78553	7483-0521
P-C14-12TUBE-JS	78554	7483-0552
P-C14-16TUBE-JS	78555	7483-0580
P-C14-6TBFLX	78565	7483-0552
P-C14-12TBFLX	78568	7483-0553
P-C14-16TBFLX	78569	7483-0554

C14 Hose Expanders

Description	Part No.	Product No.
HE-4C14	78530	7483-0555
HE-5C14	78531	7483-0556
HE-6C14	78532	7483-0557
HE-8C14	78533	7483-0558
HE-10C14	78534	7483-0559
HE-12C14	78535	7483-0560
HE-16C14	78536	7483-0561

C14 Swage Dies

Description	Part No.	Product No.
SD-4C14	78539	7483-0513
SD-5C14	78540	7483-0514
SD-6C14	78541	7483-0515
SD-8C14	78542	7483-0516
SD-10C14	78543	7483-0517
SD-12C14	78544	7483-0518
SD-16C14	78545	7483-0519

* TEFLON is a registered trademark of DuPont Corporation.

Gates Hose Swage Data

C7S, C7SNC, C8S, C8SNC Thermoplastic Hoses

Use PCTS couplings with C7S, C7SNC, C8S, C8SNC Thermoplastic hoses.

Any combination of Gates, Synflex or Parker Pusher and Dies can be used to Swage Gates C7S & C8S Thermoplastic hoses with Gates PCTS couplings.

Coupling			Assembly		Gates		Synflex		Parker	
	Description	Part No.	Product No.	Hose Insertion Length +/- .03(in)	Finished Swage OD +/- .0025 (in)	Pusher	Die	Pusher	Die	Pusher
2PCTS-2MP	80830	7336-1198-5	0.563	0.360	GM023	G302	MP023	302	PUM001	302
2PCTS-4MP	80831	7336-1199-5	0.563	0.360	GM004	G302	MP004	302	PUM004	302
3PCTS-2MP	80832	7336-1200-5	0.781	0.485	GM001	G303	MP001	303	PUM001	303
3PCTS-4MP	80833	7336-1201-5	0.781	0.485	GM004	G303	MP004	303	PUM004	303
4PCTS-2MP	80834	7336-1202-5	1.063	0.565	GM002	G304	MP002	304	PUM002	304
4PCTS-4MP	80835	7336-1203-5	1.063	0.565	GM004	G304	MP004	304	PUM004	304
4PCTS-6MP	80836	7336-1204-5	1.063	0.565	GM005	G304	MP005	304	PUM005	304
5PCTS-4MP	80837	7336-1205-5	1.063	0.625	GM004	G305	MP004	305	PUM004	305
6PCTS-4MP	80838	7336-1207-5	1.250	0.690	GM005	G306	MP005	306	PUM005	306
6PCTS-6MP	80839	7336-1208-5	1.250	0.690	GM005	G306	MP005	306	PUM005	306
6PCTS-8MP	80840	7336-1209-5	1.250	0.690	GM009	G306	MP009	306	PUM009	306
8PCTS-6MP	80824	7336-1211-5	1.500	0.840	GM008	G308	MP008	308	PUM008	308
8PCTS-8MP	80841	7336-1210-5	1.500	0.840	GM009	G308	MP009	308	PUM009	308
12PCTS-12MP	80704	7336-0033-5	1.688	1.105	GM011	G312	MP011	312	PUM011	312
16PCTS-16MP	80705	7336-0036-5	2.250	1.345	GM013	G316	MP013	316	PUM013	316
2PCTS-2MPX	80825	7337-1198-5	0.563	0.360	GM003	G302	MP003	302	PUT008	302
3PCTS-2MPX	80828	7337-1200-5	0.781	0.485	GM003	G303	MP003	303	PUT008	303
3PCTS-4MPX	80829	7337-1201-5	0.781	0.485	GM003	G303	MP003	303	PUT008	303
4PCTS-4MPX	80842	7337-1202-5	1.063	0.565	GM003	G304	MP003	304	PUT008	304
5PCTS-4MPX	80843	7337-1203-5	1.063	0.625	GM003	G305	MP003	305	PUT008	305
6PCTS-6MPX	80844	7337-1204-5	1.250	0.690	GM006	G306	MP006	306	PUT009	306
8PCTS-8MPX	80845	7337-1205-5	1.500	0.840	GM010	G308	MP010	308	PUT010	308
12PCTS-12MPX	80848	7337-0091-5	1.688	1.105	GM012	G312	MP012	312	PUT011	312
4PCTS-4MPX90	80846	7337-1210-5	1.063	0.565	GM062	G304	SP008	304	PUS001	304
6PCTS-6FP	80847	7337-0103-5	1.250	0.690	GF005	G306	FP004	306	PUF005	306
4PCTS-4FPX	80950	7338-1330-5	1.063	0.565	GF002	G304	FP002	304	PUF002	304
4PCTS-4MJ	80860	7336-1231-5	1.063	0.565	GM002	G304	MP002	304	PUM002	304
4PCTS-6MJ	80861	7336-1233-5	1.063	0.565	GM004	G304	MP004	304	PUM004	304
5PCTS-6MJ	80868	7336-1235-5	1.063	0.625	GM004	G305	MP004	305	PUM004	305
6PCTS-6MJ	80862	7336-1236-5	1.250	0.690	GM005	G306	MP005	306	PUM005	306
6PCTS-8MJ	80863	7336-1237-5	1.250	0.690	GM007	G306	MP007	306	PUM007	306
8PCTS-8MJ	80864	7336-1238-5	1.500	0.840	GM008	G308	MP008	308	PUM008	308
12PCTS-12MJ	80865	7336-0034-5	1.688	1.105	GM011	G312	MP011	312	PUM011	312
2PCTS-3FJX	80850	7338-1198-5	0.563	0.360	GF017	G302	FP017	302	PUF017	302
2PCTS-4FJSX ¹	80851	7338-1199-5	0.563	0.360	GF010	G302	FP010	302	PUF010	302
3PCTS-4FJSX ¹	80852	7338-1200-5	0.781	0.485	GF011	G303	FP011	303	PUF011	303
4PCTS-4FJSX ¹	80853	7338-1202-5	1.063	0.565	GF012	G304	FP012	304	PUF012	304
4PCTS-5FJSX ¹	80866	7338-1203-5	1.063	0.565	GF013	G304	FP013	304	PUF013	304
4PCTS-6FJX	80854	7338-1204-5	1.063	0.565	GF013	G304	FP013	304	PUF013	304
5PCTS-5FJSX ¹	80867	7338-1205-5	1.063	0.625	GF013	G305	FP013	305	PUF013	305
5PCTS-6FJX	80855	7338-1206-5	1.063	0.625	GF013	G305	FP013	305	PUF013	305
6PCTS-6FJX	80856	7338-1207-5	1.250	0.690	GF015	G306	FP015	306	PUF015	306

¹ Denotes dual seat

Gates Hose Swage Data

C7S, C7SNC, C8S, C8SNC Thermoplastic Hoses

Use PCTS couplings with C7S, C7SNC, C8S, C8SNC Thermoplastic hoses.

Any combination of Gates, Synflex or Parker Pusher and Dies can be used to Swage Gates C7S & C8S Thermoplastic hoses with Gates PCTS couplings.

Coupling			Assembly		Gates		Synflex		Parker	
Description	Part No.	Product No.	Hose Insertion Length +/- .03(in)	Finished Swage OD +/- .0025 (in)	Pusher	Die	Pusher	Die	Pusher	Die
6PCTS-8FJSX ¹	80857	7338-1208-5	1.250	0.690	GF005	G306	FP005	306	PUF005	306
8PCTS-8FJSX ¹	80858	7338-1209-5	1.500	0.840	GF016	G308	FP016	308	PUF016	308
8PCTS-10FJSX ¹	80859	7338-1210-5	1.500	0.840	GF006	G308	FP006	308	PUF006	308
8PCTS-12FJX	80898	7338-1217-5	1.500	0.840	GF008	G308	FP008	308	PUF008	308
12PCTS-10FJX	80899	7338-1218-5	1.688	1.105	GF016	G312	FP016	312	PUF016	312
12PCTS-12FJX	80708	7338-0160-5	1.688	1.105	GF008	G312	FP008	312	PUF008	312
16PCTS-16FJX	80709	7338-0161-5	2.250	1.345	GF009	G316	FP009	316	PUF009	316
4PCTS-4FJX45	80910	7338-1251-5	1.063	0.565	GT204	G304	TP204	304	PUT001	304
6PCTS-6FJX45	80915	7338-1245-5	1.250	0.690	GT206	G306	TP206	306	PUT003	306
6PCTS-6FJX45L	80893	7338-1250-5	1.250	0.690	GT206	G306	TP206	306	PUT003	306
6PCTS-8FJX45	80916	7338-1246-5	1.250	0.690	GT308	G306	TP308	306	PUT004	306
6PCTS-8FJX45L	80894	7338-1249-5	1.250	0.690	GT308	G306	TP308	306	PUT004	306
12PCTS-12FJX45	80918	7338-0155-5	1.688	1.105	GT312	G312	TP312	312	PUT005	312
4PCTS-4FJX90S	80870	7338-1272-5	1.063	0.565	GT204	G304	TP204	304	PUT001	304
4PCTS-5FJX90S	80871	7338-1274-5	1.063	0.565	GT205	G304	TP205	304	PUT002	304
5PCTS-6FJX90S	80869	7338-1276-5	1.063	0.625	GT206	G305	TP206	305	PUT003	305
6PCTS-6FJX90S	80872	7338-1278-5	1.250	0.690	GT206	G306	TP206	306	PUT003	306
6PCTS-6FJX90L	80935	7338-1279-5	1.063	0.690	GT206	G306	TP206	306	PUT003	306
6PCTS-8FJX90S	80873	7338-1280-5	1.250	0.690	GT308	G306	TP308	306	PUT004	306
6PCTS-8FJX90L	80888	7338-1281-5	1.250	0.690	GT308	G306	TP308	306	PUT004	306
8PCTS-8FJX90S	80874	7338-1282-5	1.500	0.840	GT308	G308	TP308	308	PUT004	308
12PCTS-12FJX90L	80938	7338-0151-5	1.688	1.105	GT312	G312	TP312	312	PUT005	312
12PCTS-12FJX90S	80877	7338-0150-5	1.688	1.105	GT312	G312	TP312	312	PUT005	312
4PCTS-6MB	80880	7336-1247-5	1.063	0.565	GM004	G304	MP004	304	PUM004	304
6PCTS-6MB	80881	7336-1250-5	1.250	0.690	GM005	G306	MP005	306	PUM005	306
8PCTS-8MB	80926	7336-1252-5	1.500	0.840	GM009	G308	MP009	308	PUM009	308
6PCTS-6MFFOR	80925	7336-1300-5	1.250	0.690	GM007	G306	MP007	306	PUM007	306
4PCTS-4FFORX	80883	7338-1299-5	1.063	0.565	GT205	G304	TP205	304	PUT002	304
4PCTS-6FFORX	80886	7338-1298-5	1.063	0.565	GT206	G304	TP206	304	PUT003	304
6PCTS-6FFORX	80884	7338-1300-5	1.250	0.690	GT206	G306	TP206	306	PUT003	306
8PCTS-8FFORX	80885	7338-1301-5	1.500	0.840	GT308	G308	TP308	308	PUT004	308
4PCTS-4FFORX45	80889	7338-1304-5	1.063	0.565	GT205	G304	TP205	304	PUT002	304
6PCTS-6FFORX45	80890	7338-1305-5	1.250	0.690	GT206	G306	TP206	306	PUT003	306
8PCTS-8FFORX45	80891	7338-1306-5	1.500	0.840	GT308	G308	TP308	308	PUT004	308
4PCTS-4FFORX90S	80895	7338-1310-5	1.063	0.565	GT205	G304	TP205	304	PUT002	304
4PCTS-4FFORX90L	80902	7338-1320-5	1.063	0.565	GT205	G304	TP205	304	PUT002	304
6PCTS-6FFORX90S	80896	7338-1311-5	1.250	0.690	GT206	G306	TP206	306	PUT003	306
6PCTS-6FFORX90L	80903	7338-1322-5	1.250	0.690	GT206	G306	TP206	306	PUT003	306
8PCTS-8FFORX90S	80897	7338-1312-5	1.500	0.840	GT308	G308	TP308	308	PUT004	308
8PCTS-8FFORX90L	80904	7336-1324-5	1.500	0.840	GT308	G308	TP308	308	PUT004	308
4PCTS-4FJISX	80940	7338-0164-5	1.063	0.565	GF013	G304	FP013	304	PUF013	304
6PCTS-6FJISX	80941	7338-0165-5	1.250	0.690	GF004	G306	FP004	306	PUF005	306
8PCTS-8FJISX	80942	7338-0166-5	1.500	0.840	GF006	G308	FP006	308	PUF006	308

¹ Denotes dual seat



Hose Assembly Guide (Cont'd)

12. Permanent Swage Procedures

C-14 Teflon Hose

Step 1 – Hose Cutting

After determining hose cut length by deducting for fittings, cut hose with shear. No taping or deburring is necessary, since shearing the hose holds braid flaring to a minimum.

NOTE: Always use eye protection when making assemblies.



Step 2 – Hose Insertion

Place ferrule in hose insertion die holder with the tapered end down. Place insertion dies in die holder so that the taper will guide the hose into the ferrule. Push the hose through the dies with a slight twisting motion until seated, then pull the hose out. The insertion dies will fall out as you remove the hose. Check the end of the ferrule for full insertion.



Step 3 – Hose Expansion and Stem Insertion

Next, select the proper size expansion rod and secure in a vise. Push the hose over the bead several times to expand the tube. Place the stem (and nut if used) on the rod. Push the hose onto the stem until the stem is completely inserted. No gaps between the shoulder on the stem and the ferrule. If a gap exists, ferrule must be twisted and pushed forward until gap is eliminated.



Step 4 – Swaging

Select proper size dies and pusher and install them in the Gates HS-1 hand swager (Part No. 78080/ Product No. 7483-1000) or swager conversion kit for the PC 707.

If using the PC707 with conversion kit installed, remove the actuator rod to swage. Lubricate the bore of the die set with light oil. Using one hand to hold the assembly so the fitting remains seated in the pusher, start the swage. The swage is complete when the pusher bottoms out on the dies. When the swaging is complete, reinstall the actuator rod into the crimp position. NOTE: Always use eye protection when making assemblies.



When swage is complete, the ferrule outside diameter must be within the following range:

Hose Size	Swage O.D. (In.)	Hose Size	Swage O.D. (In.)
-4	.350 - .355	-10	.673 - .678
-5	.404 - .409	-12	.800 - .805
-6	.478 - .483	-16	1.044 – 1.049
-8	.568 - .573		

If ferrule outside diameter is not within the above range, check for die wear and replace if necessary.

Gates Hose Swage Data

C14 Teflon*

Use C14 couplings with C14 hose.

Gates pushers and dies MUST BE USED to swage Gates C14 hose with Gates C14 couplings.

* TEFLON is a registered trademark of DuPont Corporation.

Coupling			Assembly			Gates		
Description	Part No.	Product No.	Hose Insertion Length +/-.03(in)	C14 Hose Insertion Die	C14 Hose Expander Die	Finished Swage OD +/- .0025 (in)	Pusher	Die
4C14-2MP-SS	G40100-0402S	7753-0008-5	-	HD-4C14	HE-4C14	0.3525	P-C14-2MP	SD-4C14
4C14-4MP-SS	G40100-0404S	7753-0001-5	-	HD-4C14	HE-4C14	0.3525	P-C14-4MP	SD-4C14
5C14-4MP-SS	G40100-0504S	7753-0002-5	-	HD-5C14	HE-5C14	0.4065	P-C14-4MP	SD-5C14
6C14-4MP-SS	G40100-0604S	7753-0009-5	-	HD-6C14	HE-6C14	0.4805	P-C14-4MP	SD-6C14
6C14-6MP-SS	G40100-0606S	7753-0003-5	-	HD-6C14	HE-6C14	0.4805	P-C14-6MP	SD-6C14
8C14-6MP-SS	G40100-0806S	7753-0010-5	-	HD-8C14	HE-8C14	0.5705	P-C14-6MP	SD-8C14
8C14-8MP-SS	G40100-0808S	7753-0004-5	-	HD-8C14	HE-8C14	0.5705	P-C14-8MP-8&10ABC	SD-8C14
10C14-8MP-SS	G40100-1008S	7753-0005-5	-	HD-10C14	HE-10C14	0.6755	P-C14-8MP-8&10ABC	SD-10C14
12C14-12MP-SS	G40100-1212S	7753-0006-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12MP-12ABC	SD-12C14
16C14-16MP-SS	G40100-1616S	7753-0007-5	-	HD-16C14	HE-16C14	1.0465	P-C14-16MP	SD-16C14
4C14-2MP-B	G40100-0402B	7753-1008-5	-	HD-4C14	HE-4C14	0.3525	P-C14-2MP	SD-4C14
4C14-4MP-B	G40100-0404B	7753-1001-5	-	HD-4C14	HE-4C14	0.3525	P-C14-4MP	SD-4C14
5C14-4MP-B	G40100-0504B	7753-1002-5	-	HD-5C14	HE-5C14	0.4065	P-C14-4MP	SD-5C14
6C14-4MP-B	G40100-0604B	7753-1009-5	-	HD-6C14	HE-6C14	0.4805	P-C14-4MP	SD-6C14
6C14-6MP-B	G40100-0606B	7753-1003-5	-	HD-6C14	HE-6C14	0.4805	P-C14-4MP	SD-6C14
8C14-6MP-B	G40100-0806B	7753-1010-5	-	HD-8C14	HE-8C14	0.5705	P-C14-6MP	SD-8C14
8C14-8MP-B	G40100-0808B	7753-1004-5	-	HD-8C14	HE-8C14	0.5705	P-C14-8MP-8&10ABC	SD-8C14
10C14-8MP-B	G40100-1008B	7753-1005-5	-	HD-10C14	HE-10C14	0.6755	P-C14-8MP-8&10ABC	SD-10C14
12C14-12MP-B	G40100-1212B	7753-1006-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12MP-12ABC	SD-12C14
16C14-16MP-B	G40100-1616B	7753-1007-5	-	HD-16C14	HE-16C14	1.0465	P-C14-16MP	SD-16C14
4C14-4MIX	G40500-0404	7753-2030-5	-	HD-4C14	HE-4C14	0.3525	P-C14-4TUBE	SD-4C14
5C14-5MIX	G40500-0505	7753-2031-5	-	HD-5C14	HE-5C14	0.4065	P-C14-5TUBE	SD-5C14
6C14-6MIX	G40500-0606	7753-2032-5	-	HD-6C14	HE-6C14	0.4805	P-C14-6TUBE	SD-6C14
8C14-8MIX	G40500-0808	7753-2033-5	-	HD-8C14	HE-8C14	0.5705	P-C14-8TUBE	SD-8C14
10C14-10MIX	G40500-1010	7753-2034-5	-	HD-10C14	HE-10C14	0.6775	P-C14-10TUBE	SD-10C14
4C14-4MIX45	G40502-0404	7753-2035-5	-	HD-4C14	HE-4C14	0.3525	P-C14-4TUBE	SD-4C14
6C14-6MIX45	G40502-0606	7753-2036-5	-	HD-6C14	HE-6C14	0.4805	P-C14-6TUBE	SD-6C14
8C14-8MIX45	G40502-0808	7753-2037-5	-	HD-8C14	HE-8C14	0.5705	P-C14-8TUBE	SD-8C14
10C14-10MIX45	G40502-1010	7753-2069-5	-	HD-10C14	HE-10C14	0.6755	P-C14-10TUBE	SD-10C14
12C14-12MIX45	G40502-1212	7753-2070-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12TUBE	SD-12C14
4C14-4MIX90	G40504-0404	7753-2038-5	-	HD-4C14	HE-4C14	0.3525	P-C14-4TUBE	SD-4C14
5C14-5MIX90	G40504-0505	7753-2039-5	-	HD-5C14	HE-5C14	0.4065	P-C14-5TUBE	SD-5C14
6C14-6MIX90	G40504-0606	7753-2040-5	-	HD-6C14	HE-6C14	0.4805	P-C14-6TUBE	SD-6C14
8C14-8MIX90	G40504-0808	7753-2041-5	-	HD-8C14	HE-8C14	0.5705	P-C14-8TUBE	SD-8C14
10C14-10MIX90	G40504-1010	7753-2042-5	-	HD-10C14	HE-10C14	0.6755	P-C14-10TUBE	SD-10C14
12C14-12MIX90	G40504-1212	7753-2071-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12TUBE	SD-12C14
4C14-4FJSX-SS ¹	G40170-0404S	7753-0012-5	-	HD-4C14	HE-4C14	0.3525	P-C14-4FJSX	SD-4C14
5C14-5FJSX-SS ¹	G40170-0505S	7753-0013-5	-	HD-5C14	HE-5C14	0.4065	P-C14-5FJSX	SD-5C14
6C14-6FJX-SS	G40170-0606S	7753-0014-5	-	HD-6C14	HE-6C14	0.4805	P-C14-6FJX	SD-6C14
8C14-8FJSX-SS ¹	G40170-0808S	7753-0015-5	-	HD-8C14	HE-8C14	0.5705	P-C14-8FJSX	SD-8C14
10C14-10FJSX-SS ¹	G40170-1010S	7753-0016-5	-	HD-10C14	HE-10C14	0.6755	P-C14-10FJSX	SD-10C14
12C14-12FJX-SS	G40170-1212S	7753-0017-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12FJX	SD-12C14
16C14-16FJSX-SS ¹	G40170-1616S	7753-0018-5	-	HD-16C14	HE-16C14	1.0465	P-C14-16FJSX	SD-16C14
4C14-4FJSX-B ¹	G40170-0404B	7753-1012-5	-	HD-4C14	HE-4C14	0.3525	P-C14-4FJSX	SD-4C14
5C14-5FJSX-B ¹	G40170-0505B	7753-1013-5	-	HD-5C14	HE-5C14	0.4065	P-C14-5FJSX	SD-5C14
6C14-6FJX-B	G40170-0606B	7753-1014-5	-	HD-6C14	HE-6C14	0.4805	P-C14-6FJX	SD-6C14

¹ Denotes dual seat. ² When swaging, do not keep the flange between the pusher and swage die. ³ When swaging, keep the flange between the pusher and swage die.



Gates Hose Swage Data

C14 Teflon*

Use C14 couplings with C14 hose.

Gates pushers and dies MUST BE USED to swage Gates C14 hose with Gates C14 couplings.

* TEFLON is a registered trademark of DuPont Corporation.

Description	Part No.	Product No.	Hose Insertion Length +/- .03 (in)	Assembly			Gates	
				C14 Hose Insertion Die	C14 Hose Expander Die	Finished Swage OD +/- .0025 (in)	Pusher	Die
6C14-6FSX-B	G40200-0606B	7753-1019-5	-	HD-6C14	HE-6C14	0.4805	P-C14-6FSX	SD-6C14
8C14-8FJSX-B ¹	G40170-0808B	7753-1015-5	-	HD-8C14	HE-8C14	0.5705	P-C14-8FJSX	SD-8C14
10C14-10FJSX-B ¹	G40170-1010B	7753-1016-5	-	HD-10C14	HE-10C14	0.6755	P-C14-10FJSX	SD-10C14
12C14-12FJX-B	G40170-1212B	7753-1017-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12FJX	SD-12C14
12C14-12FSX-B	G40200-1212B	7753-1020-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12FSX	SD-12C14
16C14-16FJSX-B ¹	G40170-1616B	7753-1018-5	-	HD-16C14	HE-16C14	1.0465	P-C14-16FJSX	SD-16C14
4C14-4FSX45	G40202-0404S	7753-2021-5	-	HD-4C14	HE-4C14	0.3525	P-C14-4TUBE	SD-4C14
5C14-5FSX45	G40202-0505S	7753-2022-5	-	HD-5C14	HE-5C14	0.4065	P-C14-5TUBE	SD-5C14
6C14-6FSX45	G40202-0606S	7753-2023-5	-	HD-6C14	HE-6C14	0.4805	P-C14-6TUBE	SD-6C14
8C14-8FSX45	G40202-0808S	7753-2024-5	-	HD-8C14	HE-8C14	0.5705	P-C14-8TUBE	SD-8C14
10C14-10FSX45	G40202-1010S	7753-2063-5	-	HD-10C14	HE-10C14	0.6755	P-C14-10TUBE	SD-10C14
12C14-12FSX45	G40202-1212S	7753-2064-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12TUBE-JS	SD-12C14
4C14-4FSX90	G40205-0404S	7753-2025-5	-	HD-4C14	HE-4C14	0.3525	P-C14-4TUBE	SD-4C14
5C14-5FSX90	G40205-0505S	7753-2026-5	-	HD-5C14	HE-5C14	0.4065	P-C14-5TUBE	SD-5C14
6C14-6FSX90	G40205-0606S	7753-2027-5	-	HD-6C14	HE-6C14	0.4805	P-C14-6TUBE	SD-6C14
8C14-8FSX90	G40205-0808S	7753-2028-5	-	HD-8C14	HE-8C14	0.5705	P-C14-8TUBE	SD-8C14
10C14-10FSX90	G40205-1010S	7753-2029-5	-	HD-10C14	HE-10C14	0.6755	P-C14-10TUBE	SD-10C14
12C14-12FSX90	G40205-1212S	7753-2066-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12TUBE-JS	SD-12C14
4C14-4FJX45	G40175-0404	7753-2049-5	-	HD-4C14	HE-4C14	0.3525	P-C14-4TUBE	SD-4C14
5C14-5FJX45	G40175-0505	7753-2050-5	-	HD-5C14	HE-5C14	0.4065	P-C14-5TUBE	SD-5C14
6C14-6FJX45	G40175-0606	7753-2051-5	-	HD-6C14	HE-6C14	0.4805	P-C14-6TUBE	SD-6C14
8C14-8FJX45	G40175-0808	7753-2052-5	-	HD-8C14	HE-8C14	0.5705	P-C14-8TUBE	SD-8C14
10C14-10FJX45	G40175-1010	7753-2053-5	-	HD-10C14	HE-10C14	0.6755	P-C14-10TUBE	SD-10C14
12C14-12FJX45	G40175-1212	7753-2054-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12TUBE-JS	SD-12C14
16C14-16FJX45	G40175-1616	7753-2055-5	-	HD-16C14	HE-16C14	1.0465	P-C14-16TUBE-JS	SD-16C14
4C14-4FJX90	G40179-0404	7753-2056-5	-	HD-4C14	HE-4C14	0.3525	P-C14-4TUBE	SD-4C14
5C14-5FJX90	G40179-0505	7753-2057-5	-	HD-5C14	HE-5C14	0.4065	P-C14-5TUBE	SD-5C14
6C14-6FJX90	G40179-0606	7753-2058-5	-	HD-6C14	HE-6C14	0.4805	P-C14-6TUBE	SD-6C14
8C14-8FJX90	G40179-0808	7753-2043-5	-	HD-8C14	HE-8C14	0.5705	P-C14-8TUBE	SD-8C14
10C14-10FJX90	G40179-1010	7753-2060-5	-	HD-10C14	HE-10C14	0.6755	P-C14-10TUBE	SD-10C14
12C14-12FJX90	G40179-1212	7753-2061-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12TUBE-JS	SD-12C14
16C14-16FJX90	G40179-1616	7753-2062-5	-	HD-16C14	HE-16C14	1.0465	P-C14-16TUBE-JS	SD-16C14
8C14-8ABC-B	G40460-0808B	7753-1036-5	-	HD-8C14	HE-8C14	0.5705	P-C14-8MP-8 & 10ABC	SD-8C14
10C14-8ABC-B	G40460-1008B	7753-1037-5	-	HD-10C14	HE-10C14	0.6755	P-C14-8MP-8 & 10ABC	SD-10C14
10C14-10ABC-B	G40460-1010B	7753-1038-5	-	HD-10C14	HE-10C14	0.6755	P-C14-8MP-8 & 10ABC	SD-10C14
12C14-12ABC-B	G40460-1212B	7753-1039-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12MP-12ABC	SD-12C14
10C14-8STA-B	G40461-1008B	7753-1041-5	-	HD-10C14	HE-10C14	0.6755	P-C14-8TUBE	SD-10C14
10C14-10STA-B	G40461-1010B	7753-1042-5	-	HD-10C14	HE-10C14	0.6755	P-C14-10TUBE	SD-10C14
12C14-12STA-B	G40461-1212B	7753-1043-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12TUBE	SD-12C14
6C14-6TBFLX ²	G40543-0606	7753-1025-5	-	HD-6C14	HE-6C14	0.4805	P-C14-6TBFLX	SD-6C14
12C14-12TBFLX ³	G40543-1212	7753-1026-5	-	HD-12C14	HE-12C14	0.8025	P-C14-12TBFLX	SD-12C14
16C14-16TBFLX ³	G40543-1616	7753-1027-5	-	HD-16C14	HE-16C14	1.0465	P-C14-16TBFLX	SD-16C14

¹ Denotes dual seat. ² When swaging, do not keep the flange between the pusher and swage die. ³ When swaging, keep the flange between the pusher and swage die.

Power Crimp® 707



General

Power Crimp® 707

MobileCrimp® 4-20

OmniCrimp® 21 / Power Crimp® 3000B

Power Crimp® 707 Calibration Procedure



Photo 1



CLOCKWISE

Photo 2

NOTE: Check calibration After Every 100 Crimps

1. Before initiating calibration procedure, cycle crimper 5 times. To cycle, dial in a setting of 2.00 and run crimper down to shutoff with no die set loaded.
2. Install the "**733**" die set to calibrate the machine using an **8G** **MegaCrimp®** coupling.
3. Set the digital readout setting to 5.20. (Rotating the knob on top of switch box clockwise will increase the number; counterclockwise will decrease the number. When changing the setting, always move to a higher number then down to the desired setting.
Example: To change from 5.00 to 5.20, move dial up to 6.00 then down to 5.20.) The readout figures may jump a number; i.e. 5.20 to 5.19 or 5.21. This will not affect the crimp OD.
4. Insert the coupling to crimp approximately 1/8" below top of die and install die cone. (See photo 1).
5. Slide the die cone assembly under the ram and depress the crimp switch. Release the switch immediately when the machine stops.
6. Remove coupling and measure crimp diameter, which should measure 1.000" \pm .003". To properly measure crimp diameter, refer to the Hose Assembly Guide instructions, Item #9, at the beginning of this manual.
7. If coupling is not within 1.000" (\pm .003") of the crimp diameter, adjust actuator rod (See photo 2).
8. To increase crimp OD – Hold the 1-1/16" actuator rod while loosening the 3/4" lock-nut. Rotate the actuator rod clockwise (One full turn of the actuator rod is approximately 0.024" crimp OD) then tighten the lock-nut down. CAUTION : Do not overtighten lock nut.
9. To decrease crimp OD – Hold the 1-1/16" actuator rod while loosening the 3/4" lock nut. Rotate the actuator rod counter clockwise (One full turn of the actuator rod is approximately 0.024" crimp OD) then tighten the lock-nut down. CAUTION – Do not overtighten lock-nut.
10. Repeat steps 3 through 7 to verify correct crimp OD.

Adjustment Procedure

Should the actual crimp diameter NOT be within the tolerance specified in the Crimp Data Charts, check the calibration of the crimper. If the calibration is correct, a slight adjustment of the digital readout may be necessary. To obtain a smaller crimp diameter, change the digital readout to a smaller number, or vice versa. Changing the digital readout by .05 (Example: 5.50 to 5.55) will change the crimp diameter by .001".

$$\text{Adjusted Setting} = \left(\frac{\text{Target Crimp OD}}{\text{Crimp OD}} \right) - \left(\frac{\text{Measured Crimp OD}}{\text{Crimp OD}} \right) \times 50 + \frac{\text{Published Approx. Setting}}{50}$$

Remember to record your *Actual* adjusted crimp setting in the column provided in the crimp data chart.

Hydraulic Hose Crimp Data
PC 707, 700 Series (8 Finger Dies)

Hose	Size	Form	Dies	Setting	Crimp Length	Length	Comp.	Appr. Crimp	Die	Actual Crimp	Unit of	Actual Crimp
A107-A	1/2	3/4	100-A	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
A107-B	1/2	3/4	100-B	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
B107-A	1/2	3/4	100-A	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
B107-B	1/2	3/4	100-B	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
C107-A	3/4	3/4	100-A	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
C107-B	3/4	3/4	100-B	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
D107-A	1	1	100-A	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
D107-B	1	1	100-B	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
E107-A	1 1/8	1 1/8	100-A	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
E107-B	1 1/8	1 1/8	100-B	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
F107-A	1 1/4	1 1/4	100-A	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
F107-B	1 1/4	1 1/4	100-B	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
G107-A	1 1/2	1 1/2	100-A	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
G107-B	1 1/2	1 1/2	100-B	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
H107-A	1 5/8	1 5/8	100-A	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
H107-B	1 5/8	1 5/8	100-B	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
I107-A	1 11/16	1 11/16	100-A	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
I107-B	1 11/16	1 11/16	100-B	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
J107-A	1 15/16	1 15/16	100-A	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
J107-B	1 15/16	1 15/16	100-B	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
K107-A	2	2	100-A	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000
K107-B	2	2	100-B	2.00	1.23	0.123	1.00	1.000	1.00	1.000	"	1.000

PC 707 Crimp Tooling

Power Crimp® 707, 700 Series 8-Finger Dies Die Sets

Die Set	721/ 731	722/ 732	733	734	735	737*	739*
Part No.	78943/ 78931	78944/ 78932	78933	78934	78935	78937	78939
Product No.	7482-1217/ 7482-0931	7482-1218/ 7482-0932	7482-0933	7482-0934	7482-0935	7482-0937	7482-0939

* Must Use No-Notch Die Cone.

Specialty and Automotive Dies

Die Set	CC-7C3	CC-7C4	740	741	742	743	744*	745	746
Part No.	78941	78942	78950	78951	78952	78953	78954	78955	78956
Product No.	7482-1122	7482-1123	7482-0947	7482-0941	7482-0942	7482-0943	7482-0944	7482-0945	7482-0946
Use	Clamp Collars	Clamp Collars	6AC	8AC	10AC	12AC	Power Steering	Grease Fitting	Misc.

* Must use No-Notch Die Cone.

Die Tooling Supplies (Supplied with new crimpers)

Item	Part No.	Product No.
Notched Die Cone	78736	7482-0239
No-Notched Die Cone	78747	7482-0297
Die Back Up Ring	78727	7482-0115
3oz Jar Molykote G Paste	78755	7482-0311
Stainless Steel Dial Caliper	78215	7369-0320

Hydraulic Hose Crimp Data

PC 707, 700 Series (8 Finger) Dies

General

Power Crimp® 707

MobileCrimp® 4-20

OmniCrimp® 21 / Power Crimp® 3000B

Hose			Stem	Ferrule		Skive / Buff	Crimp			Crimper			
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (in)	Dia. (In)	Insertion Length +/- .03 (In)	Crimp Length +/- .03 (In)	Crimp OD +/- .010 (in)	Die Set	Appx. Digital Read-out ¹	User's Actual Setting
4C1A		1/4	4G	MegaCrimp®	-----	0.875	WIRE	0.93	FULL	0.695	721	4.24	
4C1A		1/4	4G	MegaCrimp	-----	0.875	WIRE	0.93	FULL	0.695	731	7.34	
6C1A		3/8	6G	MegaCrimp	-----	0.875	WIRE	0.93	FULL	0.825	722	4.94	
6C1A		3/8	6G	MegaCrimp	-----	0.875	WIRE	0.93	FULL	0.825	732	4.94	
8C1A		1/2	8G	MegaCrimp	-----	1.250	WIRE	1.25	FULL	1.000	733	5.06	
12C1A		3/4	12G	MegaCrimp	-----	1.500	WIRE	1.50	FULL	1.340	735	5.39	
16C1A		1	16G	MegaCrimp	-----	1.750	WIRE	1.75	FULL	1.750	737 ²	6.10	
3C2A		3/16	3PC	3PC2F-2	80415	0.750	WIRE	-----	FULL	0.655	731	5.60	
3C3		3/16	3PC	3PC2F-2	80415	0.750	0.455	-----	FULL	0.660	731	6.36	
4C5C		3/16	3PC	4PC2F-2	80416	-----	-----	-----	FULL	0.620	731	4.32	
5C5C		1/4	4PC	4PC2F-2	80416	-----	-----	-----	FULL	0.690	721	3.98	
5C5C		1/4	4PC	4PC2F-2	80416	-----	-----	-----	FULL	0.690	731	7.89	
6C5C		5/16	5PC	6PC2F-2	80418	-----	-----	-----	FULL	0.765	721	6.75	
6C5C		5/16	5PC	6PC2F-2	80418	-----	-----	-----	FULL	0.765	731	11.71	
8C5C		13/32	6PC	6PC1FS	80484	-----	-----	-----	FULL	0.860	722	7.30	
8C5C		13/32	6PC	6PC1FS	80484	-----	-----	-----	FULL	0.860	732	7.30	
10C5C		1/2	8PC	10PC2F-2B	80476	-----	-----	-----	FULL	1.050	733	7.78	
12C5C		5/8	10PC	12PC1FS-M3K	80487	-----	-----	-----	FULL	1.230	734	9.03	
4C5E		3/16	3PC	3PC2F-2	80415	-----	-----	-----	FULL	0.660	731	6.36	
5C5E		1/4	4PC	4PC2F-2	80416	-----	-----	-----	FULL	0.660	731	6.36	
6C5E		5/16	5PC	5PC1FS	80483	-----	-----	-----	FULL	0.795	722	4.17	
6C5E		5/16	5PC	5PC1FS	80483	-----	-----	-----	FULL	0.795	732	4.17	
8C5E		13/32	6PC	6PC1FS	80484	-----	-----	-----	FULL	0.890	722	8.74	
8C5E		13/32	6PC	6PC1FS	80484	-----	-----	-----	FULL	0.890	732	8.74	
10C5E		1/2	8PC	8PC2F-2	80419	-----	-----	-----	FULL	0.990	733	4.76	
12C5E		5/8	10PC	10PC1FS-M3K	80486	-----	-----	-----	FULL	1.140	734	4.59	
4C5R		3/16	3PC	3PC1FS	80481	-----	-----	-----	FULL	0.610	731	3.80	
3C6		3/16	3PC	3PC2F-2	80415	0.687	0.410	-----	FULL	0.650	731	5.85	
4C6		1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	721	3.75	
4C6		1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	731	7.55	
5C6		5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.780	721	7.75	
5C6		5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.780	731	12.00	
6C6		3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.830	722	5.15	
6C6		3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.830	732	5.15	
8C6		1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.010	733	5.70	
3C6H		3/16	3PC	3PC2F-2	80415	0.687	0.410	-----	FULL	0.635	731	5.08	
4C6H		1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.750	721	6.00	
4C6H		1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.750	731	8.50	
5C6H		5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	721	8.25	
5C6H		5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	731	12.50	
6C6H		3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	722	6.63	
6C6H		3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	732	6.63	
8C6H		1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.035	733	6.85	
10C6H		5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.154	734	5.25	
12C6H		3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.390	735	8.00	
4C7S/C7SNC		1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	721	4.55	
4C7S/C7SNC		1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	731	9.26	
5C7S/C7SNC		5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.765	721	6.75	
5C7S/C7SNC		5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.765	731	11.26	
6C7S/C7SNC		3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.875	722	8.22	
6C7S/C7SNC		3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.875	732	8.22	
8C7S/C7SNC		1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.030	733	6.77	

¹ See Adjustment Procedure at beginning of PC 707 section. ² Must use No-Notch Die Cone. ³ MPLN Couplings Only.

Hydraulic Hose Crimp Data

PC 707, 700 Series (8 Finger) Dies

Hose		Stem	Ferrule		Skive / Buff		Crimp			Crimper			
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (in)	Dia. (In)	Insertion Length +/- .03 (In)	Crimp Length +/- .03 (In)	Crimp OD +/- .010 (in)	Die Set	Appx. Digital Read-out ¹	User's Actual Setting
12	C7S/C7SNC	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.340	735	5.64	
16	C7S/C7SNC	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.690	737 ²	3.03	
6	C12M	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	733	4.00	
8	C12M	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.100	733	9.95	
12	C12M	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	735	12.55	
16	C12M	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00	
20	C12M	1 1/4	20GS	20GS1F-4	G20995-0420	-----	-----	-----	FULL	2.060	739 ²	4.30	
6	C12M-MTF	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	733	4.00	
8	C12M-MTF	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.100	733	9.95	
12	C12M-MTF	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	735	12.55	
16	C12M-MTF	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00	
20	C12M-MTF	1 1/4	20GS	20GS1F-4	G20995-0420	-----	-----	-----	FULL	2.060	739 ²	4.30	
16	CPS	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00	
16	CPS-MTF	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00	
12	CPSGS	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.500	735	13.29	
12	CPSGS-MTF	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.500	735	13.29	
6	EFG4K	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	733	4.00	
8	EFG4K	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.080	733	8.88	
10	EFG4K	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	735	4.18	
12	EFG4K	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	735	12.55	
16	EFG4K	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00	
20	EFG4K	1 1/4	20GS	20GS1F-4	G20995-0420	-----	-----	-----	FULL	2.060	739 ²	4.00	
6	EFG5K	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	733	4.00	
8	EFG5K	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.080	733	8.88	
10	EFG5K	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	735	4.18	
6	EFG6K	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	733	4.00	
8	EFG6K	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.080	733	8.88	
10	EFG6K	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	735	4.18	
12	EFG5K	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	735	12.55	
16	EFG5K	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00	
12	EFG6K	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	735	12.55	
16	EFG6K	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00	
3	G1	3/16	3PC	3PC1FA	80431	-----	-----	-----	FULL	0.620	731	3.47	
3	G1	3/16	3PC	3PC1FS	80481	-----	-----	-----	FULL	0.620	731	3.47	
3	G1	3/16	3PC	3PC2F-2	80415	0.835	WIRE	-----	FULL	0.620	731	3.47	
3	G1	3/16	Grease	3MPG	-----	0.625	WIRE	-----	0.5	0.450	745	5.80	
3	G1	3/16	Grease	3MPGB	-----	0.625	WIRE	-----	0.5	0.450	V	4.10	
3	G1	3/16	Grease	3MPGB	-----	0.625	WIRE	-----	0.5	0.450	745	5.80	
4	G1	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.705	721	4.00	
4	G1	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.705	731	8.31	
5	G1	5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	722	3.54	
5	G1	5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	732	3.54	
6	G1	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.845	722	6.40	
6	G1	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.845	732	6.40	
8	G1	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.010	733	5.57	
10	G1	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.135	734	4.16	
12	G1	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.350	735	5.89	
16	G1	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.760	737 ²	6.65	
20	G1	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.050	739 ²	4.25	
4	G1H	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.720	721	4.75	
4	G1H	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.720	731	9.46	
6	G1H	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.845	722	6.67	
6	G1H	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.845	732	6.67	
8	G1H	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.020	733	6.07	

¹ See Adjustment Procedure at beginning of PC 707 section. ² Must use No-Notch Die Cone. ³ MPLN Couplings Only.

Hydraulic Hose Crimp Data

PC 707, 700 Series (8 Finger) Dies

Hose			Stem	Ferrule		Skive / Buff	Crimp			Crimper			
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (in)	Dia. (In)	Insertion Length +/- .03 (In)	Crimp Length +/- .03 (In)	Crimp OD +/- .010(in)	Die Set	Appx. Digital Read-out ¹	User's Actual Setting
10	G1H	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.135	734	4.16	
12	G1H	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.350	735	5.89	
16	G1H	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.760	737 ²	6.65	
20	G1H	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.050	739 ²	4.25	
8	G2AT-HMP	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.050	733	7.58	
10	G2AT-HMP	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.170	734	5.89	
12	G2AT-HMP	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	735	8.17	
16	G2AT-HMP	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.790	737 ²	8.28	
3	G2	3/16	3PC	3PC1FA	80431	-----	-----	-----	FULL	0.655	731	5.25	
3	G2	3/16	3PC	3PC1FS	80481	-----	-----	-----	FULL	0.655	731	5.25	
3	G2	3/16	3PC	3PC2F-2	80415	0.750	WIRE	-----	FULL	0.655	731	5.60	
4	G2	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	721	5.75	
4	G2	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	731	10.10	
6	G2	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.890	722	8.57	
6	G2	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.890	732	8.57	
8	G2	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.050	733	7.58	
10	G2	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.170	734	5.89	
12	G2	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	735	8.17	
16	G2	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.790	737 ²	8.28	
20	G2	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.125	739 ²	8.04	
20	G2H	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.125	739 ²	8.04	
4	G2L	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.730	721	5.25	
4	G2L	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.730	731	9.93	
6	G2L	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.880	722	7.61	
6	G2L	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.880	732	7.61	
8	G2L	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.040	733	7.44	
10	G2L	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.160	734	5.02	
12	G2L	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.385	735	7.81	
16	G2L	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.790	737 ²	5.00	
20	G2L	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.125	739 ²	8.04	
20	G3K	1 1/4	20GS	20GS1F-4	G20995-0420	-----	-----	-----	FULL	2.060	739 ²	4.30	
20	G3K-MTF	1 1/4	20GS	20GS1F-4	G20995-0420	-----	-----	-----	FULL	2.060	739 ²	4.30	
10	G4K	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	735	4.18	
12	G4K	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	735	12.55	
16	G4K	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00	
20	G4K	1 1/4	20GS	20GS1F-4	G20995-0420	-----	-----	-----	FULL	2.060	739 ²	4.30	
6	G4K-MTF	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	733	4.00	
8	G4K-MTF	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.100	733	9.95	
12	G4K-MTF	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	735	12.55	
16	G4K-MTF	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00	
20	G4K-MTF	1 1/4	20GS	20GS1F-4	G20995-0420	-----	-----	-----	FULL	2.060	739 ²	4.30	
8	G5K	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.100	733	9.95	
10	G5K	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	735	4.18	
12	G5K	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.500	735	13.29	
16	G5K	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00	
8	G5K-MTF	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.100	733	9.95	
10	G5K-MTF	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	735	4.18	
12	G5K-MTF	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.500	735	13.29	
16	G5K-MTF	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00	
6	G6K	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	733	4.00	
8	G6K	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.100	733	9.95	
10	G6K	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	735	4.18	
12	G6K	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.500	735	13.29	
16	G6K	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00	

¹ See Adjustment Procedure at beginning of PC 707 section. ² Must use No-Notch Die Cone. ³ MPLN Couplings Only.

Hydraulic Hose Crimp Data

PC 707, 700 Series (8 Finger) Dies

Hose			Stem	Ferrule		Skive / Buff		Crimp			Crimper			
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (in)	Dia. (In)	Insertion Length +/- .03 (In)	Crimp Length +/- .03 (In)	Crimp OD +/- .010 (in)	Die Set	Appx. Digital Read-out ¹	User's Actual Setting	
6	G6K-MTF	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	FULL	0.980	733	4.00			
8	G6K-MTF	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	FULL	1.100	733	9.95			
10	G6K-MTF	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	FULL	1.320	735	4.18			
12	G6K-MTF	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	FULL	1.500	735	13.29			
16	G6K-MTF	1	16GS	16GS1F-4	G20995-0416	-----	-----	FULL	1.750	737 ²	6.00			
12	GMV	3/4	12G	MegaCrimp	-----	1.375	1.20	1.50	FULL	1.430	735	10.19		
16	GMV	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.800	737 ²	9.02		
20	GMV	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.110	739 ²	7.38		
4	J2AT ³	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	721	5.75		
4	J2AT ³	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	731	10.10		
6	J2AT ³	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	722	8.81		
6	J2AT ³	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	732	8.81		
4	J2AT-MTF ³	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	721	5.75		
4	J2AT-MTF ³	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	731	10.10		
6	J2AT-MTF ³	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	722	8.81		
6	J2AT-MTF ³	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	732	8.81		
12	LW	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	735	12.55		
16	LW	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00		
12	LW-MTF	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	735	12.55		
16	LW-MTF	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	737 ²	6.00		
4	M2T	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	721	4.50		
4	M2T	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	731	8.82		
4	M2T	1/4	4PC-SS	4PC1F-M2SS	85027	-----	-----	-----	FULL	0.660	731	4.94		
6	M2T	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	722	7.61		
6	M2T	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	732	7.61		
6	M2T	3/8	6PC-SS	6PC1F-M2SS	85028	-----	-----	-----	FULL	0.810	722	3.53		
6	M2T	3/8	6PC-SS	6PC1F-M2SS	85028	-----	-----	-----	FULL	0.810	732	3.53		
8	M2T	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.035	733	6.83		
8	M2T	1/2	8PC-SS	8PC1F-M2SS	85029	-----	-----	-----	FULL	1.000	733	4.69		
10	M2T	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.155	734	5.15		
10	M2T	5/8	10PC-SS	10PC1F-M2SS	85030	-----	-----	-----	FULL	1.110	733	10.40		
12	M2T	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.370	735	6.90		
12	M2T	3/4	12PC-SS	12PC1F-M2SS	85031	-----	-----	-----	FULL	1.330	735	4.31		
16	M2T	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.725	737 ²	4.74		
16	M2T	1	16PC-SS	16PC1F-M2SS	85032	-----	-----	-----	FULL	1.655	736	10.39		
4	M2T-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	721	4.50		
4	M2T-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	731	8.82		
6	M2T-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	722	7.88		
6	M2T-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	732	7.88		
8	M2T-MTF	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.035	733	6.83		
10	M2T-MTF	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.155	734	5.15		
12	M2T-MTF	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.370	735	6.90		
16	M2T-MTF	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.725	737 ²	4.74		
16	M2TPLUS	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.710	737 ²	4.14		
16	M2TPLUS-MTF	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.710	737 ²	4.14		
4	M3K	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	721	3.75		
4	M3K	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	731	8.06		
5	M3K	5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	722	3.54		
5	M3K	5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	732	3.54		
6	M3K	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	722	4.72		
6	M3K	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	732	4.72		
8	M3K	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.000	733	5.06		
10	M3K	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.170	734	5.89		
12	M3K	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	735	8.17		
16	M3K	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.800	737 ²	8.83		

¹ See Adjustment Procedure at beginning of PC 707 section. ² Must use No-Notch Die Cone. ³ MPLN Couplings Only.

Hydraulic Hose Crimp Data

PC 707, 700 Series (8 Finger) Dies

General

Power Crimp® 707

MobileCrimp® 4-20

OmniCrimp® 21 / Power Crimp® 3000B

Hose			Stem	Ferrule		Skive / Buff	Crimp			Crimper			
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (in)	Dia. (In)	Insertion Length +/- .03 (In)	Crimp Length +/- .03 (In)	Crimp OD +/- .010 (in)	Die Set	Appx. Digital Read-out ¹	User's Actual Setting
16	M3K	1	16GS	16GS1F-2	G20995-0416	-----	-----	-----	FULL	1.610	736	8.25	
20	M3K	1 1/4	20GS	20GS1F-4	G20995-0420	-----	-----	-----	FULL	2.060	739 ²	4.30	
4	M3K-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	721	3.75	
4	M3K-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	731	8.44	
6	M3K-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	722	4.99	
6	M3K-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	732	4.99	
8	M3K-MTF	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.000	733	5.06	
10	M3K-MTF	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.170	734	5.89	
12	M3K-MTF	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	735	8.17	
16	M3K-MTF	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.800	737 ²	8.83	
16	M3K-MTF	1	16GS	16GS1F-2	G20995-0416	-----	-----	-----	FULL	1.610	736	8.25	
4	M3K-XTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	721	3.75	
4	M3K-XTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	731	8.44	
5	M3K-XTF	5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	722	3.54	
5	M3K-XTF	5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	732	3.54	
6	M3K-XTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	722	4.99	
6	M3K-XTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	732	4.99	
8	M3K-XTF	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.000	733	5.06	
10	M3K-XTF	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.170	734	5.89	
12	M3K-XTF	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	735	8.17	
16	M3K-XTF	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.800	737 ²	8.17	
16	M3K-XTF	1	16GS	16GS1F-2	G20995-0416	-----	-----	-----	FULL	1.610	736	8.25	
4	M4K	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	721	4.50	
4	M4K	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	731	8.82	
4	M4K	1/4	4PC-SS	4PC1F-M2SS	85027	-----	-----	-----	FULL	0.660	731	4.94	
6	M4K	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	722	7.61	
6	M4K	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	732	7.61	
8	M4K	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.060	733	8.08	
10	M4K	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.165	734	5.64	
12	M4K	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	735	8.17	
12	M4K	3/4	12GS	12GS1F-2	G20995-0212	-----	-----	-----	FULL	1.300	735	3.25	
4	M4K-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	721	4.50	
4	M4K-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	731	8.82	
6	M4K-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	722	7.88	
6	M4K-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	732	7.88	
8	M4K-MTF	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.060	733	8.08	
10	M4K-MTF	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.165	734	5.64	
12	M4K-MTF	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	735	8.17	
12	M4K-MTF	3/4	12GS	12GS1F-2	G20995-0212	-----	-----	-----	FULL	1.300	735	3.25	
4	M4K-XTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	721	4.50	
4	M4K-XTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	731	8.82	
6	M4K-XTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	732	7.61	
6	M4K-XTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	722	7.61	
8	M4K-XTF	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.035	733	6.87	
10	M4K-XTF	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.165	734	5.64	
12	M4K-XTF	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	735	8.17	
12	M4K-XTF	3/4	12GS	12GS1F-2	G20995-0212	-----	-----	-----	FULL	1.300	735	3.25	
4	M5K	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	721	4.50	
4	M5K	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	731	8.82	
4	M5K	1/4	4PC-SS	4PC1F-M2SS	85027	-----	-----	-----	FULL	0.660	731	4.94	
4	MCPB+	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	721	5.75	
4	MCPB+	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	731	10.48	
6	MCPB+	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	722	9.08	
6	MCPB+	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	732	9.08	

¹ See Adjustment Procedure at beginning of PC 707 section. ² Must use No-Notch Die Cone. ³ MPLN Couplings Only.

Hydraulic Hose Crimp Data

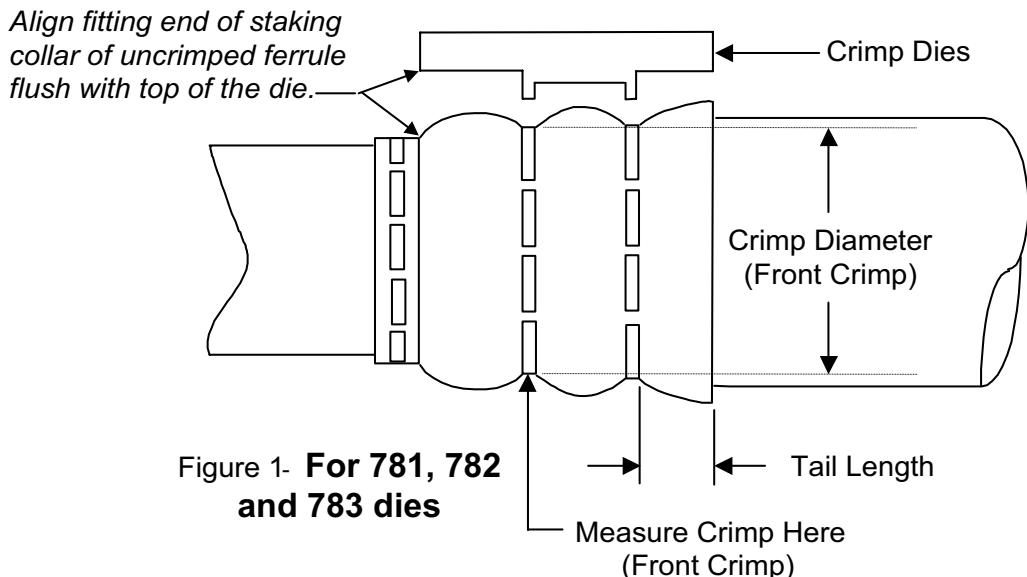
PC 707, 700 Series (8 Finger) Dies

Hose			Stem	Ferrule		Skive / Buff		Crimp			Crimper		
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (in)	Dia. (In)	Insertion Length +/- .03 (In)	Crimp Length +/- .03 (In)	Crimp OD +/- .010 (in)	Die Set	Appx. Digital Read-out ¹	User's Actual Setting
8 MCPB+	1/2	8G	MegaCrimp	-----	-----	1.25	FULL	1.060	733	8.08			
12 MCPB+	3/4	12G	MegaCrimp	-----	-----	1.50	FULL	1.395	735	8.17			
16 MCPB+	1	16G	MegaCrimp	-----	-----	1.75	FULL	1.800	737 ²	8.83			
20 MCPB+	1 1/4	20G	MegaCrimp	-----	-----	1.75	FULL	2.125	739 ²	8.04			
4 MCPB PLUS-MTF	1/4	4G	MegaCrimp	-----	-----	0.93	FULL	0.740	731	10.48			
4 MCPB PLUS-MTF	1/4	4G	MegaCrimp	-----	-----	0.93	FULL	0.740	721	5.75			
6 MCPB PLUS-MTF	3/8	6G	MegaCrimp	-----	-----	0.93	FULL	0.895	722	9.08			
6 MCPB PLUS-MTF	3/8	6G	MegaCrimp	-----	-----	0.93	FULL	0.895	732	9.08			
8 MCPB PLUS-MTF	1/2	8G	MegaCrimp	-----	-----	1.25	FULL	1.060	733	8.08			
12 MCPB PLUS-MTF	3/4	12G	MegaCrimp	-----	-----	1.50	FULL	1.395	735	8.17			
16 MCPB PLUS-MTF	1	16G	MegaCrimp	-----	-----	1.75	FULL	1.800	737 ²	8.83			
20 MCPB PLUS-MTF	1 1/4	20G	MegaCrimp	-----	-----	1.75	FULL	2.125	739 ²	8.04			
4 MEGATECH ACR	1/4	4G	MegaCrimp	-----	-----	0.93	FULL	0.700	721	3.75			
4 MEGATECH ACR	1/4	4G	MegaCrimp	-----	-----	0.93	FULL	0.700	731	7.80			
6 MEGATECH ACR	3/8	6G	MegaCrimp	-----	-----	0.93	FULL	0.810	722	4.99			
6 MEGATECH ACR	3/8	6G	MegaCrimp	-----	-----	0.93	FULL	0.810	732	4.99			
8 MEGATECH ACR	1/2	8G	MegaCrimp	-----	-----	1.25	FULL	0.980	733	4.25			
10 MEGATECH ACR	5/8	10G	MegaCrimp	-----	-----	1.12	FULL	1.160	734	5.58			
3 RLA	3/16	3PC	3PC2F-2	80415	-----	-----	FULL	0.640	731	5.34			
4 RLA	1/4	4G	MegaCrimp	-----	-----	0.93	FULL	0.720	721	4.75			
4 RLA	1/4	4G	MegaCrimp	-----	-----	0.93	FULL	0.720	731	9.52			
6 RLA	3/8	6G	MegaCrimp	-----	-----	0.93	FULL	0.860	722	7.50			
6 RLA	3/8	6G	MegaCrimp	-----	-----	0.93	FULL	0.860	732	7.50			
8 RLA	1/2	8G	MegaCrimp	-----	-----	1.25	FULL	1.080	733	9.29			
10 RLA	5/8	10G	MegaCrimp	-----	-----	1.12	FULL	1.140	734	4.59			
12 RLA	3/4	12G	MegaCrimp	-----	-----	1.50	FULL	1.430	735	10.19			
16 RLA	1	16G	MegaCrimp	-----	-----	1.75	FULL	1.690	737 ²	3.03			
4 TR500	1/4	4G	MegaCrimp	-----	-----	0.93	FULL	0.680	731	6.53			
4 TR500	1/4	4G	MegaCrimp	-----	-----	0.93	FULL	0.680	721	3.00			
6 TR500	3/8	6G	MegaCrimp	-----	-----	0.93	FULL	0.810	722	4.35			
6 TR500	3/8	6G	MegaCrimp	-----	-----	0.93	FULL	0.810	732	4.35			
8 TR500	1/2	8G	MegaCrimp	-----	-----	1.25	FULL	0.980	733	4.30			
10 TR500	5/8	10G	MegaCrimp	-----	-----	1.12	FULL	1.130	733	11.80			
12 TR500	3/4	12G	MegaCrimp	-----	-----	1.50	FULL	1.300	735	3.60			

Power Crimp® 707

GL Coupling Crimping Instructions

To achieve the proper tail length, line up the fitting end of the ferrule with the top of the die (see Figure 1) prior to crimping.



Hose			Stem	Ferrule		Skive/Buff		Crimp			Crimper		
Dash Size	Description	Size (in.)	Type	Description	Part No.	Length +/- .03(in.)	Diameter (in.)	Insertion Length +/- .03(in)	Tail Length +/- .10(in.)	Crimp OD +/- .01 (In.)	Die Set	PC707 Digital Setting	User's Actual Setting
12	GMV	3/4	12GL	1-pc GL	-----	-----	-----	1.750	0.50	1.12	781	6.70	
16	GMV	1	16GL	1-pc GL	-----	-----	-----	2.125	0.60	1.36	782	7.00	
20	GMV	1 1/4	20GL	1-pc GL	-----	-----	-----	2.250	0.50	1.66	783	7.00	

Power Crimp® 707

Clamp Collar Crimping Instructions

Care must be taken when crimping clamp collars onto a hydraulic hose. If crimp is too tight, hose will be crushed, dramatically reducing its service life. If crimp is too loose, collar could slide along hose's length causing abrasion and eventual hose cover failure.

Remember: Clamp collars must be crimped before the hose couplings.

Use the following instructions to determine crimp diameter, which can then be used to find crimping setting in Table 2. The required clamp collar for a specific hydraulic hose is provided in Table 1.

1. Measure hose's outside diameter at the location where clamp collar will be crimped. This can be accomplished by using a pie tape or by using the average hose outside diameter measured with a dial caliper.
2. Obtain crimp diameter by adding hose outside diameter to twice the clamp collar wall thickness (see formula below).



$$\text{Crimp Diameter} = (\text{Hose O.D.}) + [2 \times .065 \text{ (Clamp Collar Wall Thickness)}]$$

When crimping clamp collar, the crimp die should be located in the center of the collar, which will result in a 1/8" flare on each side of the collar.

Table 1

Description	Part Number	Product Number	Hydraulic Hose Applications	Length (In.)	PC707 Die
CC1.12	80276	7334-45805	10M2T, 10G2	2.250	7C3
CC1.20	80279	7334-37015	10M2T, 10G2	1.525	7C3
CC1.25	80277	7334-45885	12M2T, 12G2, 12M4K	2.000	7C4
CC1.37	80278	7334-45895	12C12, 12G4K	2.000	7C4

Table 2

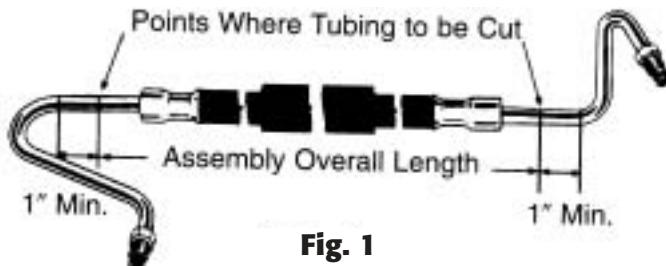
7C3 Die		7C4 Die	
Crimp Diameter	Approx. Setting	Crimp Diameter	Approx. Setting
1.050	5.80	1.170	2.65
1.055	6.07	1.175	2.89
1.060	6.33	1.180	3.13
1.065	6.60	1.185	3.37
1.070	6.87	1.190	3.61
1.075	7.14	1.195	3.85
1.080	7.40	1.200	4.09
1.085	7.67	1.205	4.33
1.090	7.94	1.210	4.57
1.095	8.21	1.215	4.81
1.100	8.47	1.220	5.05
1.105	8.74	1.225	5.29
1.110	9.01	1.230	5.53
1.115	9.28	1.235	5.77
1.120	9.54	1.240	6.01
1.125	9.81	1.245	6.25
1.130	10.08	1.250	6.49
1.135	10.35	1.255	6.73
1.140	10.61	1.260	6.97
1.145	10.88	1.265	7.21
1.150	11.15	1.270	7.45
1.155	11.42	1.275	7.69
1.160	11.69		
1.165	11.95		

Power Crimp® 707

Power Steering Male Flareless Assembly Instructions

Hose Preparation and Assembly

1. Measure Tube O.D.
2. Select the proper Male Flareless coupling for the application.
3. Determine the length of the replacement assembly. Measure the distance between the points where the tubing is to be cut. See Fig. 1.



NOTE: Tubing must be cut at 1" from the start of any bend. Read "Tubing Preparation Assembly" section on next page before cutting.

$$\text{Cut Length} = \frac{\text{Assembly Overall Length}}{\text{Cutoff Dimension (Coupling 1)}} - \frac{\text{Cutoff Dimension (Coupling 2)}}{1" \text{ Min.}}$$

4. Determine the necessary cut length of hose.
(Cutoff dimensions are in Table below.)

Cutoff Dimensions

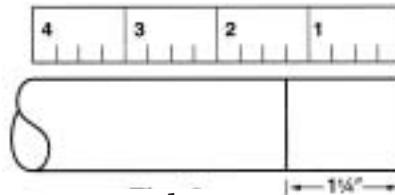
For Power Steering Couplings

Part No.	Description	Cutoff (In.)
80730	6PS-4MFA	.996
80731	6PS-5MFA	.996
80732	6PS-6MFA	1.012
80735	6PS-M8MFA	.934
80736	6PS-M10MFA	.973
80737	6PS-M12MFA	.973

5. Cut hose to the calculated cut length. End must be square ($\pm 5^\circ$). See Fig. 2



6. Mark the hose 1-1/4" ($\pm 1/32"$) from the end of the hose with a marker pen. Do not damage hose. See Fig. 3.



7. Insert a 6PS coupling into the hose until the end of the ferrule is even with the mark. (See Fig. 4.)



8. Select the proper digital setting for your die set.

P/S Die Setting	744 Die Setting
4.00	7.00

9. Insert the properly prepared hose and coupling into the crimper. Line up the top of the die with the bottom of the stem hex. See Fig. 5 & 6.



10. Place no-notch cone on die fingers. Press the crimp button. When you hear the pump shut off, release your finger from the crimp button. The crimp is now complete.

Power Crimp® 707

Power Steering Male Flareless Assembly Instructions (cont'd)

11. Measure the Crimp O.D. per Fig. 6. Crimp O.D. must be within the specified tolerance.

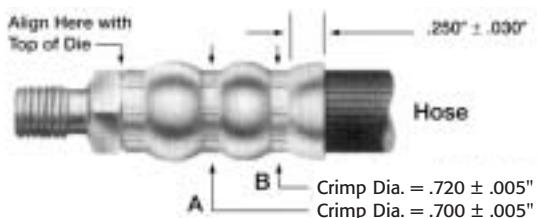


Fig. 6

12. Check the assembly to make sure the correct overall length has been obtained.
13. Inspect the assembly to make sure it has a clean bore and no internal obstructions.
Clean if necessary.

Tubing Preparation Assembly

1. Tube End Condition

- Before cutting tube, mark both ends of the assembly so that it can be properly reassembled. These marks must be made on the tubing beyond the point where the tubing will be cut. Use a marker pen to mark the tubing so the surface won't be scratched.
- Tube end must be cut squarely ($\pm 5^\circ$).
- Smooth the tube inside and out by removing all the burrs and rough edges with steel wool. Clean all metal particles from inside the tube.
- The bare end of the tube must be long enough for the nut and sleeve to be placed over the tube. (1" minimum length before the start of any bend.)
- There also must be sufficient tube length for the tube end to seat against the shoulder in the thread end of the stem. (1" minimum length before the start of any bend.)

2. Nut and Sleeve Placement (Tube End)

- Install the hex nut over the tube, positioned so the shoulder end is placed on the tube first. The thread end will then face the hose assembly.
- Place the sleeve on the tube so the tapered end will face the hose assembly.



3. Connect to the Tube End

(Preliminary Connection)

- Insert the tube into the thread end of the hose assembly until it bottoms against the shoulder.



- Screw the hex nut to the thread end until finger tight.
- Using a wrench, tighten approximately 1 turn ($\pm 1/4$ turn) to preset.

4. Inspect

- Disassemble and inspect compression of the sleeve on the tube. The sleeve must be compressed sufficiently on the tube so it is not easily removed.
- The tube end will be slightly distorted from butting against the internal shoulder. NOTE: Makeup of the correct connection is critical for proper use and safety.

5. Final Assembly

- Insert the tube into the thread end of the hose assembly.
- With a wrench, tighten down until a sudden increase in torque is felt. Turn nut approximately 1/6 turn (but no more than 1/3 turn) to create a seal between the sleeve, tube and seat of the stem.
- CAUTION: Overtightening may cause stripped threads and/or collapse of the tube.
- Before tightening the second end, line up the two marks on the tubing to assure proper orientation.



Power Crimp® 707

Crimp Data for Gates PolarSeal® Hose With G45 Series (ACA) Couplings

Gates recommends only those hose and coupling combinations specified in the Gates Hydraulic Products Catalogs. Gates disclaims any liability for any hose assemblies which have not been produced in conformance with Gates' assembly recommendations.

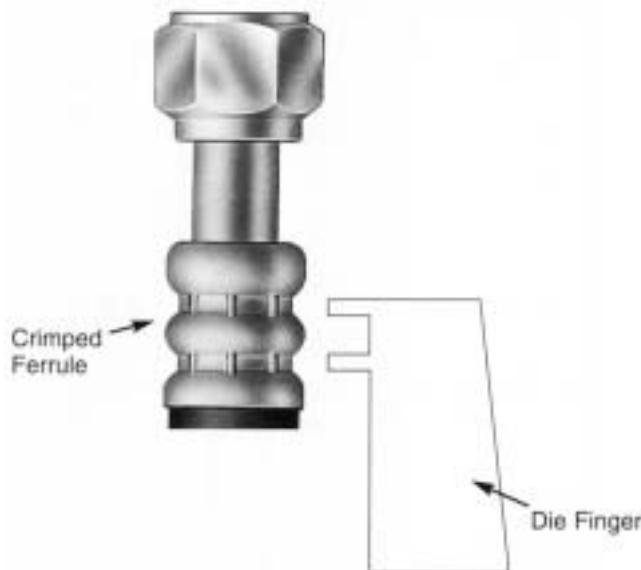
Changing Digital Readout

Rotating the knob on top of switch box clockwise will increase the number; counterclockwise will decrease the number. When changing the setting, always move to a higher number then down to the desired setting. Example: To change from 5.00 to 5.50, move dial up to 6.00 then down to 5.50.

Crimp Diameter

Should the actual crimp diameter NOT be within the recommended crimp tolerance, check the proper calibration. (See Operator's Manual.) If the calibration is correct, a slight adjustment to the setting or digital readout may be necessary. To obtain a smaller crimp diameter, change setting or digital readout to a larger number.

Changing the digital readout by .05 (Example 5.50 to 5.55) will change the crimp diameter by .001".



IMPORTANT

To assure a quality assembly, check the FIRST assembly of each run.
Measure the crimped O.D. and compare it to the figure listed in the "Crimp Diameter" column.

If ACTUAL crimped dimensions are within specification, you have made a good assembly.

Hose		Fitting Type	Crimp Diameter ($\pm .010"$)	Ferrule Position	Letter Series		700 Series		Actual Crimper Setting
Type	I.D. (In.)				Die	Setting	Data Die	Setting	
6AC134a	5/16	6ACA	.690	Centered	W	5.60	740	6.10	
8AC134a	13/32	8ACA	.780	Centered	X	5.90	741	6.55	
10AC134a	1/2	10ACA	.890	Centered	Y	5.50	742	6.25	
12AC134a	5/8	12ACA	1.020	Centered	Z	6.00	743	6.50	

Automotive Service Hose Crimp Data

PC 707, 700 Series (8 Finger) Dies

Hose			Stem		Ferrule		Skive / Buff		Crimp			Crimper		
Size (In)	Type	Dash Size	Dash Type	Description	Part No.		Length +/- .03 (In)	Dia. (In)	Hose Insertion Length +/- .03 (In)	Length +/- .03 (In)	Crimp OD +/- .010 (In)	Die Set	Approx. Digital Readout ¹	User's Actual Setting
1/4	Charter® Air Hose	4 PC	4PC2F-2	80416		-	-	-	Full	0.725	731	9.67		
3/8	Charter® Air Hose	6 PC	6PC2-2	80418		-	-	-	Full	0.800	732	4.41		
1/2	Charter® Air Hose	8 PC	8PC2F-2	80419		-	-	-	Full	1.025	733	6.52		
3/8	LP350	6 PC	6PC2F-2	80418		-	-	-	Full	0.800	722	5.02		
3/8	LP350	6 PC	6PC2F-2	80418		-	-	-	Full	0.800	732	5.02		
1/4	Multi-Use 1-Braid (19B)	4 PC	4PC2F-2	80416		-	-	-	Full	0.648	731	5.74		
5/16	Multi-Use 1-Braid (19B)	5 PC	5PC1FA	80433		-	-	-	Full	0.760	731	11.18		
5/16	Multi-Use 1-Braid (19B)	5 PC	5PC1FA	80433		-	-	-	Full	0.760	721	7.63		
3/8	Multi-Use 1-Braid (19B)	6 PC	6PC2F-2	80418		-	-	-	Full	0.770	731	11.97		
3/8	Multi-Use 1-Braid (19B)	6 PC	6PC2F-2	80418		-	-	-	Full	0.770	721	8.15		
1/2	Multi-Use 1-Braid (19B)	8 PC	8PC2F-2	80419		-	-	-	Full	1.020	733	5.97		
1/4	Multi-Use 2-Braid (19B)	4 PC	4PC2F-2	80416		-	-	-	Full	0.680	731	7.38		
1/4	Multi-Use 2-Braid (19B)	4 PC	4PC2F-2	80416		-	-	-	Full	0.680	721	3.45		
5/16	Multi-Use 2-Braid (19B)	5 PC	6PC2F-2	80418		-	-	-	Full	0.745	731	10.69		
5/16	Multi-Use 2-Braid (19B)	5 PC	6PC2F-2	80418		-	-	-	Full	0.745	721	6.85		
3/8	Multi-Use 2-Braid (19B)	6 PC	6PC2F-4	80462		-	-	-	Full	0.885	732	8.50		
3/8	Multi-Use 2-Braid (19B)	6 PC	6PC2F-4	80462		-	-	-	Full	0.885	722	8.50		
1/2	Multi-Use 2-Braid (19B)	8 PC	8PC2F-4	80463		-	-	-	Full	1.065	733	8.34		
1/4	Safety Stripe® Air Hose	4 PC	4PC2F-2	80416		-	-	-	Full	0.725	731	9.67		
3/8	Safety Stripe® Air Hose	6 PC	6PC2-2	80418		-	-	-	Full	0.800	732	4.41		
1/2	Safety Stripe® Air Hose	8 PC	8PC2F-2	80419		-	-	-	Full	1.025	733	6.52		

PowerClean™ Hose Crimp Data

PC 707, 700 Series (8 Finger) Dies

Hose			Stem		Ferrule			Skive / Buff		Crimp			Crimper		
Size (in)	Type	Work. Press. (psi)	Dash Size	Dash Type	Description	Part No.	Product No.	Length +/- .03 (in)	Dia. (in)	Hose Insertion Length +/- .03 (in)	Length +/- .03 (in)	Crimp OD +/- .010 (in)	Die Set	Appx. Digital Read-out ¹	User's Actual Setting
1/2	PC2500	2500	8 G	MegaCrimp®	-	-	-	-	-	1.25	Full	1.010	733	5.57	
3/8	PC3000	3000	6 G	MegaCrimp®	-	-	-	-	-	0.93	Full	0.845	732	6.40	
3/8	PC3000	3000	6 G	MegaCrimp®	-	-	-	-	-	0.93	Full	0.845	722	6.40	
1/4	PC3500	3500	4 G	MegaCrimp®	-	-	-	-	-	0.93	Full	0.705	731	8.31	
1/4	PC3500	3500	4 G	MegaCrimp®	-	-	-	-	-	0.93	Full	0.705	721	4.76	
3/8	PC4000	4000	6 G	MegaCrimp®	-	-	-	-	-	0.93	Full	0.845	732	6.40	
3/8	PC4000	4000	6 G	MegaCrimp®	-	-	-	-	-	0.93	Full	0.845	722	6.40	
1/2	PC4000	4000	8 G	MegaCrimp®	-	-	-	-	-	1.25	Full	1.050	733	7.58	
3/8	PC5000	5000	6 G	MegaCrimp®	-	-	-	-	-	0.93	Full	0.890	732	8.57	
3/8	PC5000	5000	6 G	MegaCrimp®	-	-	-	-	-	0.93	Full	0.890	722	8.57	
1/4	PC6000	6000	4 G	MegaCrimp®	-	-	-	-	-	0.93	Full	0.740	731	10.10	
1/4	PC6000	6000	4 G	MegaCrimp®	-	-	-	-	-	0.93	Full	0.740	721	6.59	

¹ See Adjustment Procedure at beginning of PC 707 section. ² Must use No-Notch Die Cone, AA and 720 dies are interchangeable.



MobileCrimp® 4-20

Digital Dial



Positive Stop



General

Power Crimp® 707

MobileCrimp® 4-20

OmniCrimp® 21 / Power Crimp® 3000B

Gates MobileCrimp® 4-20

Digital Dial (DD) and Positive Stop (PS)

General

Power Crimp® 707

MobileCrimp® 4-20

OmniCrimp® 21 / Power Crimp® 3000B

Die Sets

Die Set	MC21/ MC31	MC22/ MC32	MC33	MC34	MC35	MC37	MC39
Part No.	78558/ 78468	78559/ 78469	78470	78471	78472	78474	78476
Product No.	7482-1220/ 7482-1018	7482-1221/ 7482-1019	7482-1133	7482-1134	7482-1135	7482-1137	7482-1139

Specialty and Automotive Dies

Die Set	MC40	MC41	MC42	MC43	MC44	MC45	MC47	MCC3	MCC4
Part No.	78431	78432	78433	78434	78452	78497	78499	78590	78591
Product No.	7482-1140	7482-1141	7482-1142	7482-1143	7482-1144	7482-1145	7482-1273	7482-0981	7482-0982
Use	6AC134a	8AC134a	10AC134a	12AC134a	Power Steering	Grease Fitting	-5 C7S/C7SNC	Clamp Collars	Clamp Collars

Die Tooling Supplies

Item	Part No.	Product No.
3oz Jar Molykote G Paste	78755	7482-0311
Stainless Steel Dial Caliper	78215	7369-0320



Hydraulic Hose Crimp Data

MC4-20 Digital Dial and Positive Stop Crimpers

Hose			Stem	Ferrule		Skive / Buff		Crimp			Crimper		
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (In.)	Dia. (In.)	Insertion Length +/- .03 (In.)	Crimp OD +/- .010 (In.)	Die Set	MC 4-20 Digital Setting ¹	User's Actual Setting	MC 4-20 Spacer Ring
4C1A		1/4	4G	MegaCrimp	-----	0.875	WIRE	0.93	FULL	0.695	MC21	215	R4
4C1A		1/4	4G	MegaCrimp	-----	0.875	WIRE	0.93	FULL	0.695	MC31	345	W3
6C1A		3/8	6G	MegaCrimp	-----	0.875	WIRE	0.93	FULL	0.825	MC22	235	R4
6C1A		3/8	6G	MegaCrimp	-----	0.875	WIRE	0.93	FULL	0.825	MC32	235	R4
8C1A		1/2	8G	MegaCrimp	-----	1.250	WIRE	1.25	FULL	1.000	MC33	245	R4
12C1A		3/4	12G	MegaCrimp	-----	1.500	WIRE	1.50	FULL	1.340	MC35	250	W4
16C1A		1	16G	MegaCrimp	-----	1.750	WIRE	1.75	FULL	1.750	MC37	240	B4
3C2A		3/16	3PC	3PC2F-2	80415	0.750	WIRE	-----	FULL	0.655	MC31	265	W4
3C3		3/16	3PC	3PC2F-2	80415	0.750	0.455	-----	FULL	0.660	MC31	275	W4
4C5C		3/16	3PC	4PC2F-2	80416	-----	-----	-----	FULL	0.620	MC31	195	W5
5C5C		1/4	4PC	4PC2F-2	80416	-----	-----	-----	FULL	0.690	MC21	205	B5
5C5C		1/4	4PC	4PC2F-2	80416	-----	-----	-----	FULL	0.690	MC31	335	R3
6C5C		5/16	5PC	6PC2F-2	80418	-----	-----	-----	FULL	0.765	MC21	340	B3
6C5C		5/16	5PC	6PC2F-2	80418	-----	-----	-----	FULL	0.765	MC31	485	R1
8C5C		13/32	6PC	6PC1FS	80484	-----	-----	-----	FULL	0.860	MC22	305	R3
8C5C		13/32	6PC	6PC1FS	80484	-----	-----	-----	FULL	0.860	MC32	305	R3
10C5C		1/2	8PC	10PC2F-2B	80476	-----	-----	-----	FULL	1.050	MC33	340	W3
12C5C		5/8	10PC	12PC1FS-M3K	80487	-----	-----	-----	FULL	1.230	MC34	375	R2
4C5E		3/16	3PC	3PC2F-2	80415	-----	-----	-----	FULL	0.660	MC31	275	W4
5C5E		1/4	4PC	4PC2F-2	80416	-----	-----	-----	FULL	0.660	MC31	275	W4
6C5E		5/16	5PC	5PC1FS	80483	-----	-----	-----	FULL	0.795	MC22	175	R5
6C5E		5/16	5PC	5PC1FS	80483	-----	-----	-----	FULL	0.795	MC32	175	R5
8C5E		13/32	6PC	6PC1FS	80484	-----	-----	-----	FULL	0.890	MC22	370	B3
8C5E		13/32	6PC	6PC1FS	80484	-----	-----	-----	FULL	0.890	MC32	370	B3
10C5E		1/2	8PC	8PC2F-2	80419	-----	-----	-----	FULL	0.990	MC33	225	R4
12C5E		5/8	10PC	10PC1FS-M3K	80486	-----	-----	-----	FULL	1.140	MC34	200	B5
4C5R		3/16	3PC	3PC1FS	80481	-----	-----	-----	FULL	0.610	MC31	175	R5
3C6		3/16	3PC	3PC2F-2	80415	0.687	0.410	-----	FULL	0.650	MC31	255	R4
4C6		1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	MC21	220	R4
4C6		1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	MC31	340	W3
5C6		5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.780	MC21	390	R2
5C6		5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.780	MC31	510	W1
6C6		3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.830	MC32	255	R4
8C6		1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.010	MC33	265	W4
3C6H		3/16	3PC	3PC2F-2	80415	0.687	0.410	-----	FULL	0.635	MC31	225	B5
4C6H		1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.750	MC21	310	W3
4C6H		1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.750	MC31	450	B2
5C6H		5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	MC21	370	B3
5C6H		5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	MC31	530	W1
6C6H		3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	MC22	205	B5
6C6H		3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	MC32	205	B5
8C6H		1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.035	MC33	320	W3
10C6H		5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.154	MC34	240	W4
12C6H		3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.390	MC35	380	B3
4C7S/C7SNC		1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC21	250	W4
4C7S/C7SNC		1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC31	385	B3
5C7S/C7SNC		5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.765	MC47	186	B5
6C7S/C7SNC		3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.875	MC22	335	W3
6C7S/C7SNC		3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.875	MC32	335	W3
8C7S/C7SNC		1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.030	MC33	305	R3
12C7S/C7SNC		3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.340	MC35	250	W4

¹ See Adjustment Procedure at beginning of MC4-20 section. ² MPLN Couplings Only.

Hydraulic Hose Crimp Data

MC4-20 Digital Dial and Positive Stop Crimpers

Hose			Stem	Ferrule		Skive / Buff		Crimp			Crimper		
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (In.)	Dia. (In.)	Insertion Length +/- .03 (In.)	Crimp OD +/- .010 (In.)	Die Set	MC 4-20 Digital Setting ¹	User's Actual Setting	MC 4-20 Spacer Ring
16	C7S/C7SNC	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.690	MC37	140	W5
6	C12M	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	MC33	170	B5
8	C12M	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.100	MC33	425	B2
12	C12M	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	MC35	540	B1
16	C12M	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230	W3
20	C12M	1 1/4	20MGS	20MGS-4	1-piece	-----	-----	-----	FULL	2.060	MC39	180	R4
6	C12M-MTF	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	MC33	170	B5
8	C12M-MTF	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.100	MC33	425	B2
12	C12M-MTF	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	MC35	540	B1
16	C12M-MTF	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230	W3
20	C12M-MTF	1 1/4	20MGS	20MGS-4	1-piece	-----	-----	-----	FULL	2.060	MC39	180	R4
16	CPS	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230	W3
12	CPSGS	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.500	MC35	540	W1
12	CPSGS-MTF	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.500	MC35	540	W1
16	CPS-MTF	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230	W3
6	EFG4K	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	MC33	170	B5
8	EFG4K	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.080	MC33	374	R2
10	EFG4K	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	MC35	170	R4
12	EFG4K	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	MC35	540	B1
16	EFG4K	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230	W3
20	EFG4K	1 1/4	20MGS	20MGS-4	1-piece	-----	-----	-----	FULL	2.060	MC39	180	R4
6	EFG5K	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	MC33	170	B5
8	EFG5K	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.080	MC33	374	R2
10	EFG5K	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	MC35	170	R4
12	EFG5K	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	MC35	540	B1
16	EFG5K	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230	W3
6	EFG6K	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	MC33	170	B5
8	EFG6K	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.080	MC33	374	R2
10	EFG6K	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	MC35	170	R4
12	EFG6K	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	MC35	540	B1
16	EFG6K	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230	W3
3	G1	3/16	3PC	3PC1FA	80431	-----	-----	-----	FULL	0.620	MC31	195	W5
3	G1	3/16	3PC	3PC1FS	80481	-----	-----	-----	FULL	0.620	MC31	195	W5
3	G1	3/16	3PC	3PC2F-2	80415	0.835	WIRE	-----	FULL	0.620	MC31	195	W5
3	G1	3/16	Grease	3MPG	-----	0.625	WIRE	-----	0.500	0.450	MC45	185	B5
3	G1	3/16	Grease	3MPGB	-----	0.625	WIRE	-----	0.500	0.450	MC45	185	B5
4	G1	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.705	MC21	230	W4
4	G1	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.705	MC31	365	B3
5	G1	5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	MC32	145	R5
6	G1	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.845	MC22	275	W4
6	G1	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.845	MC32	275	W4
8	G1	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.010	MC33	265	W4
10	G1	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.135	MC34	190	W5
12	G1	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.350	MC35	270	B4
16	G1	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.760	MC37	290	R3
20	G1	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.050	MC39	230	R4
4	G1H	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.720	MC21	265	B4
4	G1H	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.720	MC31	395	R2
6	G1H	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.845	MC22	275	W4
6	G1H	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.845	MC32	275	W4
8	G1H	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.020	MC33	285	B4
10	G1H	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.135	MC34	190	W5

¹ See Adjustment Procedure at beginning of MC4-20 section. ² MPLN Couplings Only.

Hydraulic Hose Crimp Data

MC4-20 Digital Dial and Positive Stop Crimpers

Hose			Stem	Ferrule		Skive / Buff		Crimp			Crimper			
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (In.)	Dia. (In.)	Insertion Length +/- .03 (In.)	Crimp OD +/- .010 (In.)	Crimp Length	Die Set	MC 4-20 Digital Setting ¹	User's Actual Setting	MC 4-20 Spacer Ring
12	G1H	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.350	MC35	270		B4
16	G1H	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.760	MC37	290		R3
20	G1H	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.050	MC39	230		R4
8	G2AT-HMP	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.050	MC33	340		W3
10	G2AT-HMP	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.170	MC34	255		W4
12	G2AT-HMP	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	MC35	355		B3
16	G2AT-HMP	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.790	MC37	365		B3
3	G2	3/16	3PC	3PC1FA	80431	-----	-----	-----	FULL	0.655	MC31	265		W4
3	G2	3/16	3PC	3PC1FS	80481	-----	-----	-----	FULL	0.655	MC31	265		W4
3	G2	3/16	3PC	3PC2F-2	80415	0.750	WIRE	-----	FULL	0.655	MC31	265		W4
4	G2	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	MC21	295		R3
4	G2	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	MC31	435		W2
6	G2	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.890	MC22	370		B3
6	G2	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.890	MC32	370		B3
8	G2	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.050	MC33	340		W3
10	G2	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.170	MC34	255		W4
12	G2	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	MC35	355		B3
16	G2	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.790	MC37	360		B3
20	G2	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.125	MC39	380		B3
20	G2H	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.125	MC39	380		B3
4	G2L	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.730	MC21	275		R3
4	G2L	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.730	MC31	415		W2
6	G2L	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.880	MC22	345		W3
6	G2L	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.880	MC32	345		W3
8	G2L	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.040	MC33	333		R3
10	G2L	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.160	MC34	246		W4
12	G2L	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.385	MC35	337		W3
16	G2L	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.790	MC37	360		B3
20	G2L	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.125	MC39	340		B3
20	G3K	1 1/4	20MGS	20MGS-4	1-piece	-----	-----	-----	FULL	2.060	MC39	180		R4
20	G3K-MTF	1 1/4	20MGS	20MGS-4	1-piece	-----	-----	-----	FULL	2.060	MC39	180		R4
10	G4K	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	MC35	170		R4
12	G4K	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	MC35	540		B1
16	G4K	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230		W3
20	G4K	1 1/4	20MGS	20MGS-4	1-piece	-----	-----	-----	FULL	2.060	MC39	180		R4
6	G4K-MTF	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	MC33	170		B5
8	G4K-MTF	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.100	MC33	425		B2
12	G4K-MTF	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	MC35	540		B1
16	G4K-MTF	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230		W3
20	G4K-MTF	1 1/4	20MGS	20MGS-4	1-piece	-----	-----	-----	FULL	2.060	MC39	180		R4
8	G5K	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.100	MC33	425		B2
10	G5K	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	MC35	170		R4
12	G5K	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.500	MC35	540		W1
16	G5K	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230		W3
8	G5K-MTF	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.100	MC33	425		B2
10	G5K-MTF	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	MC35	170		R4
12	G5K-MTF	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.500	MC35	540		W1
16	G5K-MTF	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230		W3
6	G6K	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	MC33	170		B5
8	G6K	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.100	MC33	425		B2
10	G6K	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	MC35	170		R4
12	G6K	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.500	MC35	540		W1

¹ See Adjustment Procedure at beginning of MC4-20 section. ² MPLN Couplings Only.

Hydraulic Hose Crimp Data

MC4-20 Digital Dial and Positive Stop Crimpers

Hose			Stem	Ferrule		Skive / Buff		Crimp		Crimper				
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (In.)	Dia. (In.)	Insertion Length +/- .03 (In.)	Crimp Length	Crimp OD +/- .010 (In.)	Die Set	MC 4-20 Digital Setting ¹	User's Actual Setting	MC 4-20 Spacer Ring
16	G6K	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230		W3
6	G6K-MTF	3/8	6GS	6GS1F-4	G20995-0406	-----	-----	-----	FULL	0.980	MC33	170		B5
8	G6K-MTF	1/2	8GS	8GS1F-4	G20995-0408	-----	-----	-----	FULL	1.100	MC33	425		B2
10	G6K-MTF	5/8	10GS	10GS1F-4	G20995-0410	-----	-----	-----	FULL	1.320	MC35	170		R4
12	G6K-MTF	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.500	MC35	540		W1
16	G6K-MTF	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230		W3
12	GMV	3/4	12G	MegaCrimp	-----	1.375	1.200	1.50	FULL	1.430	MC35	420		W2
16	GMV	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.800	MC37	380		R2
20	GMV	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.110	MC39	350		W3
4	J2AT ²	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	MC21	295		R3
4	J2AT ²	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	MC31	435		W2
6	J2AT ²	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	MC22	380		B3
6	J2AT ²	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	MC32	380		B3
4	J2AT-MTF ²	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	MC21	295		R3
4	J2AT-MTF ²	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	MC31	435		W2
6	J2AT-MTF ²	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	MC22	380		B3
6	J2AT-MTF ²	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	MC32	380		B3
12	LW	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	MC35	540		B1
16	LW	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230		W3
12	LW-MTF	3/4	12GS	12GS1F-4	G20995-0412	-----	-----	-----	FULL	1.480	MC35	540		B1
16	LW-MTF	1	16GS	16GS1F-4	G20995-0416	-----	-----	-----	FULL	1.750	MC37	230		W3
4	M2T	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC21	250		W4
4	M2T	1/4	4PC-SS	4PC1F-M2SS	85027	-----	-----	-----	FULL	0.660	MC31	275		W4
4	M2T	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC31	385		B3
6	M2T	3/8	6PC-SS	6PC1F-M2SS	85028	-----	-----	-----	FULL	0.810	MC22	205		B5
6	M2T	3/8	6PC-SS	6PC1F-M2SS	85028	-----	-----	-----	FULL	0.810	MC32	205		B5
6	M2T	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	MC22	325		W3
6	M2T	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	MC32	325		W3
8	M2T	1/2	8PC-SS	8PC1F-M2SS	85029	-----	-----	-----	FULL	1.000	MC33	295		B4
8	M2T	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.035	MC33	315		R3
10	M2T	5/8	10PC-SS	10PC1F-M2SS	85030	-----	-----	-----	FULL	1.110	MC33	480		R1
10	M2T	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.155	MC34	230		R4
12	M2T	3/4	12PC-SS	12PC1F-M2SS	85031	-----	-----	-----	FULL	1.330	MC35	235		R4
12	M2T	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.370	MC35	310		R3
16	M2T	1	16PC-SS	16PC1F-M2SS	85032	-----	-----	-----	FULL	1.655	MC36	485		B1
16	M2T	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.725	MC37	215		W4
4	M2T-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC21	250		W4
4	M2T-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC31	385		B3
6	M2T-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	MC22	325		W3
6	M2T-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	MC32	325		W3
8	M2T-MTF	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.035	MC33	315		R3
10	M2T-MTF	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.155	MC34	230		R4
12	M2T-MTF	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.370	MC35	310		R3
16	M2T-MTF	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.725	MC37	215		W4
16	M2TPLUS	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.710	MC37	180		B5
16	M2TPLUS-MTF	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.710	MC37	180		B5
4	M3K	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	MC31	355		W3
4	M3K	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	MC21	220		R4
5	M3K	5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	MC22	145		R5
5	M3K	5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	MC32	145		R5
6	M3K	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	MC22	205		B5
6	M3K	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	MC32	205		B5
8	M3K	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.000	MC33	245		R4

¹ See Adjustment Procedure at beginning of MC4-20 section. ² MPLN Couplings Only.

Hydraulic Hose Crimp Data

MC4-20 Digital Dial and Positive Stop Crimpers

Hose			Stem	Ferrule		Skive / Buff		Crimp			Crimper		
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (In.)	Dia. (In.)	Insertion Length +/- .03 (In.)	Crimp OD +/- .010 (In.)	Die Set	MC 4-20 Digital Setting ¹	User's Actual Setting	MC 4-20 Spacer Ring
10	M3K	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.170	MC34	255	W4
12	M3K	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	MC35	355	B3
16	M3K	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.800	MC37	380	R2
16	M3K	1	16GS	16GS1F-2	G20995-0416	-----	-----	-----	FULL	1.610	MC36	345	B3
20	M3K	1 1/4	20MGS	20MGS-4	1-piece	-----	-----	-----	FULL	2.060	MC39	180	R4
4	M3K-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	MC21	220	R4
4	M3K-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	MC31	355	W3
6	M3K-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	MC22	205	B5
6	M3K-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	MC32	205	B5
8	M3K-MTF	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.000	MC33	245	R4
10	M3K-MTF	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.170	MC34	255	W4
12	M3K-MTF	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	MC35	355	B3
16	M3K-MTF	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.800	MC37	380	R2
16	M3K-MTF	1	16GS	16GS1F-2	G20995-0416	-----	-----	-----	FULL	1.610	MC36	345	B3
4	M3K-XTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	MC21	220	R4
4	M3K-XTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	MC31	355	W3
5	M3K-XTF	5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	MC22	145	R5
5	M3K-XTF	5/16	5G	MegaCrimp	-----	-----	-----	0.93	FULL	0.790	MC32	145	R5
6	M3K-XTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	MC22	205	B5
6	M3K-XTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	MC32	205	B5
8	M3K-XTF	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.000	MC33	245	R4
10	M3K-XTF	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.170	MC34	255	W4
12	M3K-XTF	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	MC35	355	B3
16	M3K-XTF	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.800	MC37	380	R2
16	M3K-XTF	1	16GS	16GS1F-2	G20995-0416	-----	-----	-----	FULL	1.610	MC36	345	B3
4	M4K	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC21	250	W4
4	M4K	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC31	385	B3
6	M4K	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	MC22	325	W3
6	M4K	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	MC32	325	W3
8	M4K	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.060	MC33	360	B3
10	M4K	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.165	MC34	250	R4
12	M4K	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	MC35	355	B3
12	M4K	3/4	12GS	12GS1F-2	G20995-0212	-----	-----	-----	FULL	1.300	MC35	439	B5
4	M4K-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC21	250	W4
4	M4K-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC31	385	B3
6	M4K-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	MC22	325	W3
6	M4K-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	MC32	325	W3
8	M4K-MTF	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.060	MC33	360	B3
10	M4K-MTF	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.165	MC34	250	R4
12	M4K-MTF	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	MC35	355	B3
12	M4K-MTF	3/4	12GS	12GS1F-2	G20995-0212	-----	-----	-----	FULL	1.300	MC35	439	B5
4	M4K-XTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC21	250	W4
4	M4K-XTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC31	385	B3
6	M4K-XTF	3/8	06G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	MC22	325	W3
6	M4K-XTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.870	MC32	325	W3
8	M4K-XTF	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.035	MC33	313	R3
10	M4K-XTF	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.165	MC34	250	R4
12	M4K-XTF	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	MC35	355	B3
12	M4K-XTF	3/4	12GS	12GS1F-2	G20995-0212	-----	-----	-----	FULL	1.300	MC35	439	B5
4	M5K	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC21	250	W4
4	M5K	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.715	MC31	385	B3
4	MCPB+	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	MC21	295	R3
4	MCPB+	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	MC31	436	W2

¹ See Adjustment Procedure at beginning of MC4-20 section. ² MPLN Couplings Only.

Hydraulic Hose Crimp Data

MC4-20 Digital Dial and Positive Stop Crimpers

Hose			Stem	Ferrule		Skive / Buff		Crimp			Crimper			
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (In.)	Dia. (In.)	Insertion Length +/- .03 (In.)	Crimp OD +/- .010 (In.)	Crimp Length (In.)	Die Set	MC 4-20 Digital Setting ¹	User's Actual Setting	MC 4-20 Spacer Ring
6MCPB+	6MCPB+	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	MC22	378		B3
6MCPB+	6MCPB+	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	MC32	378		B3
8MCPB+	8MCPB+	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.060	MC33	362		B3
12MCPB+	12MCPB+	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	MC35	355		B3
16MCPB+	16MCPB+	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.800	MC37	389		R2
20MCPB+	20MCPB+	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.125	MC39	380		B3
4MCPB PLUS-MTF	4MCPB PLUS-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	MC21	295		R3
4MCPB PLUS-MTF	4MCPB PLUS-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	MC31	435		W2
6MCPB PLUS-MTF	6MCPB PLUS-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	MC22	378		B3
6MCPB PLUS-MTF	6MCPB PLUS-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	MC32	378		B3
8MCPB PLUS-MTF	8MCPB PLUS-MTF	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.060	MC33	360		B3
12MCPB PLUS-MTF	12MCPB PLUS-MTF	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	MC35	355		B3
16MCPB PLUS-MTF	16MCPB PLUS-MTF	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.800	MC37	380		R2
20MCPB PLUS-MTF	20MCPB PLUS-MTF	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.125	MC39	380		B3
4MEGATECH ACR	4MEGATECH ACR	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	MC21	220		R4
4MEGATECH ACR	4MEGATECH ACR	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	MC31	355		W3
6MEGATECH ACR	6MEGATECH ACR	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	MC22	205		B5
6MEGATECH ACR	6MEGATECH ACR	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	MC32	205		B5
8MEGATECH ACR	8MEGATECH ACR	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	0.980	MC33	204		B5
10MEGATECH ACR	10MEGATECH ACR	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.160	MC34	238		W4
3RLA	3RLA	3/16	3PC	3PC2F-2	80415	-----	-----	-----	FULL	0.640	MC31	235		R4
4RLA	4RLA	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.720	MC21	260		B4
4RLA	4RLA	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.720	MC31	395		R2
6RLA	6RLA	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.860	MC22	305		R3
6RLA	6RLA	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.860	MC32	305		R3
8RLA	8RLA	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.080	MC33	401		R2
10RLA	10RLA	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.140	MC34	200		R2
12RLA	12RLA	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.430	MC35	420		W2
16RLA	16RLA	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.690	MC37	140		W5
4TR500	4TR500	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.680	MC21	170		B5
4TR500	4TR500	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.680	MC31	305		R3
6TR500	6TR500	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	MC22	204		B5
6TR500	6TR500	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	MC32	204		B5
8TR500	8TR500	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	0.980	MC33	204		B5
10TR500	10TR500	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.130	MC33	500		W1
12TR500	12TR500	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.300	MC35	156		B5

MobileCrimp® 4-20

GL Coupling Crimping Instructions

To achieve the proper tail length, line up the fitting end of the ferrule with the top of the die (see Figure 1) prior to crimping.

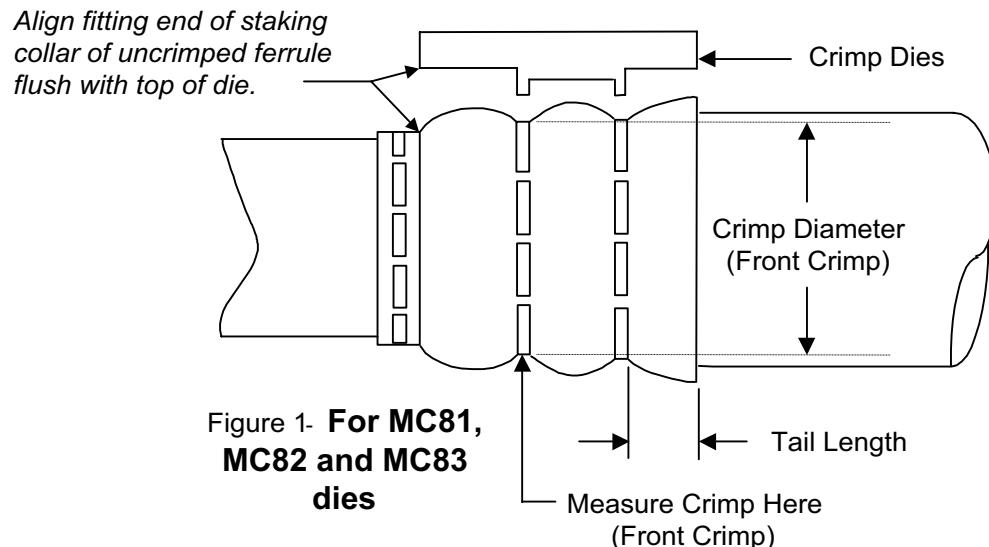


Figure 1

Hose			Stem	Ferrule		Skive/Buff		Crimp			Crimper			
Dash Size	Description	Size (in.)	Type	Desc.	Part No.	Length +/- .03 (In.)	Diameter (In.)	Insertion Length +/- .03 (In)	Tail Length +/- .10 (In.)	Crimp O.D. +/- 0.01 (In.)	Die Set	MC 4-20 Digital Setting	User's Actual Setting	MC 4-20 Spacer Ring
12	GMV	3/4	12GL	1-pc GL	-----	-----	-----	1.750	0.50	1.12	MC81	250		R1
16	GMV	1	16GL	1-pc GL	-----	-----	-----	2.125	0.60	1.36	MC82	250		R3
20	GMV	1 1/4	20GL	1-pc GL	-----	-----	-----	2.250	0.50	1.66	MC83	275		W1

MobileCrimp® 4-20

Clamp Collar Crimping Instructions

Care must be taken when crimping clamp collars onto a hydraulic hose. If crimp is too tight, hose will be crushed, dramatically reducing its service life. If crimp is too loose, collar could slide along hose's length causing abrasion and eventual hose cover failure.

Remember: Clamp collars must be crimped before the hose couplings.

Use the following instructions to determine crimp diameter, which can then be used to find crimping setting in Table 2. The required clamp collar for a specific hydraulic hose is provided in Table 1.

1. Measure hose's outside diameter at the location where clamp collar will be crimped. This can be accomplished by using a pie tape or by using the average hose outside diameter measured with a dial caliper.
2. Obtain crimp diameter by adding hose outside diameter to twice the clamp collar wall thickness (see formula below).

$$\text{Crimp Diameter} = (\text{Hose O.D.}) + [2 \times .065 \text{ (Clamp Collar Wall Thickness)}]$$

When crimping clamp collar, the crimp die should be located in the center of the collar, which will result in a 1/8" flare on each side of the collar.



Table 1

Description	Part Number	Product Number	Hydraulic Hose Applications	Length (In.)	MC 4-20 Die
CC1.12	80276	7334-45805	10M2T, 10G2	2.250	MCC3
CC1.20	80279	7334-37015	10M2T, 10G2	1.525	MCC3
CC1.25	80277	7334-45885	12M2T, 12G2, 12M4K	2.000	MCC4
CC1.37	80278	7334-45895	12C12, 12G4K	2.000	MCC4

Table 2

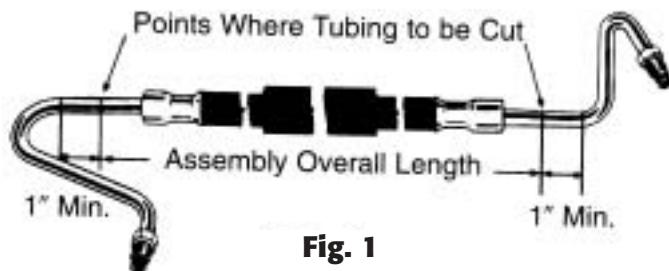
MCC3 Die		MCC4 Die	
Crimp Diameter	Approx. Setting	Crimp Diameter	Approx. Setting
1.050	260	1.250	260
1.055	270	1.255	270
1.060	282	1.260	282
1.065	293	1.265	293
1.070	303	1.270	303
1.075	315	1.275	315
1.080	325	1.280	325
1.085	335	1.285	335
1.090	347	1.290	347
1.095	358	1.295	358
1.100	370	1.300	370
1.105	380	1.305	380
1.110	390	1.310	390
1.115	400	1.315	400
1.120	412	1.320	412
1.125	423	1.325	423
1.130	435	1.330	435
1.135	445	1.335	445
1.140	455	1.340	455
1.145	465	1.345	465
1.150	477	1.350	477
1.155	488	1.355	488
1.160	500	1.360	500
1.165	510	1.365	510

Gates MobileCrimp® 4-20

Power Steering Male Flareless Assembly Instructions

Hose Preparation and Assembly

1. Measure Tube O.D.
2. Select the proper Male Flareless coupling for the application.
3. Determine the length of the replacement assembly. Measure the distance between the points where the tubing is to be cut. See Fig. 1.



NOTE: Tubing must be cut at 1" from the start of any bend. Read "Tubing Preparation Assembly" section on next page before cutting.

4. Determine the necessary cut length of hose.

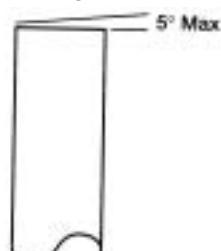
$$\text{Cut Length} = \frac{\text{Assembly Overall Length}}{\text{Cutoff Dimension (Coupling 1)}} - \frac{\text{Cutoff Dimension (Coupling 2)}}{1"}$$

(Cutoff dimensions are in Table below.)

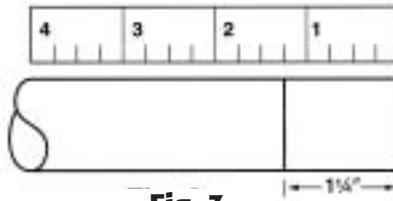
Cutoff Dimensions For Power Steering Couplings

Part No.	Description	Cutoff (In.)
80730	6PS-4MFA	.996
80731	6PS-5MFA	.996
80732	6PS-6MFA	1.012
80735	6PS-M8MFA	.934
80736	6PS-M10MFA	.973
80737	6PS-M12MFA	.973

5. Cut hose to the calculated cut length. End must be square ($\pm 5^\circ$). See Fig. 2.



6. Mark the hose 1-1/4" ($\pm 1/32"$) from the end of the hose with a marker pen. Do not damage hose. See Fig. 3.



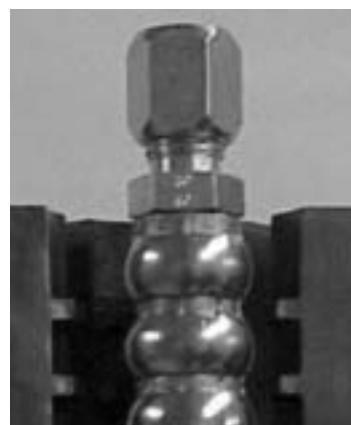
7. Insert a **6PS** coupling into the hose until the end of the ferrule is even with the mark. (See Fig. 4.)



8. Place the **MC44** die into the crimper. Use setting /spacer ring as shown below:

Digital Dial	Positive Stop Spacer Ring
240	Blue Power Steering Do Not Use Black Power Steering Spacer Ring

9. Insert the properly prepared hose and coupling into the crimper. Line up the top of the die with the bottom of the stem hex. (See Fig. 5.)



10. Place no-notch cone on die fingers. Press the crimp button. When you hear the pump pressurize or the light and buzzer sound, release your finger from the crimp button. The crimp is now complete.

Gates MobileCrimp® 4-20

Power Steering Male Flareless Assembly Instructions (cont'd)

11. Measure the Crimp O.D. per Fig. 6. Crimp O.D. must be within the specified tolerance.

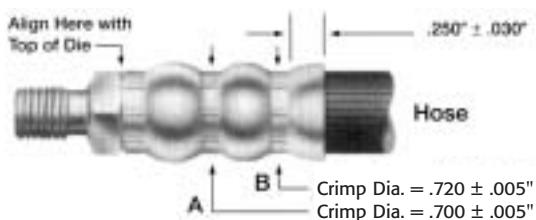


Fig. 6

12. Check the assembly to make sure the correct overall length has been obtained.
13. Inspect the assembly to make sure it has a clean bore and no internal obstructions. Clean if necessary.

Tubing Preparation Assembly

1. Tube End Condition

- A. Before cutting tube, mark both ends of the assembly so that it can be properly reassembled. These marks must be made on the tubing beyond the point where the tubing will be cut. Use a marker pen to mark the tubing so the surface won't be scratched.
- B. Tube end must be cut squarely ($\pm 5^\circ$).
- C. Smooth the tube inside and out by removing all the burrs and rough edges with steel wool. Clean all metal particles from inside the tube.
- D. The bare end of the tube must be long enough for the nut and sleeve to be placed over the tube. (1" minimum length before the start of any bend.)
- E. There also must be sufficient tube length for the tube end to seat against the shoulder in the thread end of the stem. (1" minimum length before the start of any bend.)

2. Nut and Sleeve Placement (Tube End)

- A. Install the hex nut over the tube, positioned so the shoulder end is placed on the tube first. The thread end will then face the hose assembly.
- B. Place the sleeve on the tube so the tapered end will face the hose assembly.



3. Connect to the Tube End (Preliminary Connection)

- A. Insert the tube into the thread end of the hose assembly until it bottoms against the shoulder.



- B. Screw the hex nut to the thread end until finger tight.
- C. Using a wrench, tighten approximately 1 turn ($\pm 1/4$ turn) to preset.

4. Inspect

- A. Disassemble and inspect compression of the sleeve on the tube. The sleeve must be compressed sufficiently on the tube so it is not easily removed.
- B. The tube end will be slightly distorted from butting against the internal shoulder. NOTE: Makeup of the correct connection is critical for proper use and safety.

5. Final Assembly

- A. Insert the tube into the thread end of the hose assembly.
- B. With a wrench, tighten down until a sudden increase in torque is felt. Turn nut approximately 1/6 turn (but no more than 1/3 turn) to create a seal between the sleeve, tube and seat of the stem.
- C. CAUTION: Overtightening may cause stripped threads and/or collapse of the tube.
- D. Before tightening the second end, line up the two marks on the tubing to assure proper orientation.



MobileCrimp® 4-20

Crimp Data for Gates PolarSeal® Hose With G45 Series (ACA) Couplings

Gates recommends only those hose and coupling combinations specified in the Gates Hydraulic Products Catalogs. Gates disclaims any liability for any hose assemblies which have not been produced in conformance with Gates' assembly recommendations.

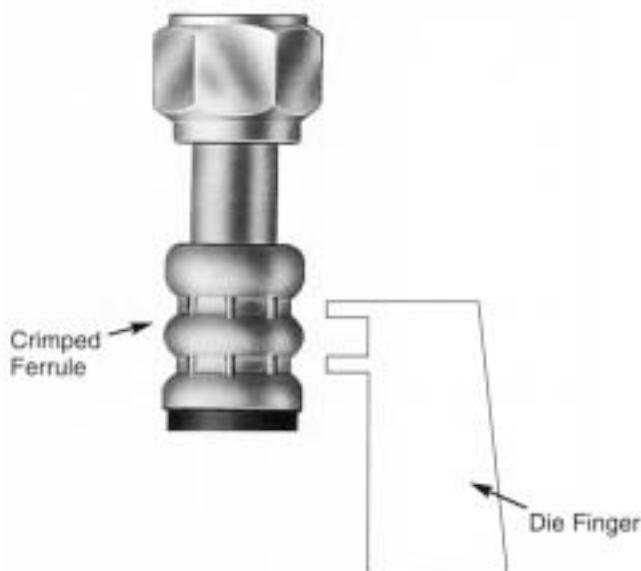
Changing Digital Readout

Rotating the knob on front of switch box clockwise will increase the number; counterclockwise will decrease the number. When changing the setting, always move to a higher number then down to the desired setting. Example: To change from 200 to 245, move dial up to 300 then down to 245.

Crimp Diameter

Should the actual crimp diameter NOT be within the recommended crimp tolerance, check the proper calibration. (See Operator's Manual.) If the calibration is correct, a slight adjustment to the setting or digital readout may be necessary. To obtain a smaller crimp diameter, change setting or digital readout to a larger number.

Changing the digital readout by 002 (Example 245 to 247) will change the crimp diameter by .001".



IMPORTANT

To assure a quality assembly, check the FIRST assembly of each run. Measure the crimped O.D. and compare it to the figure listed in the "Crimp Diameter" column. If ACTUAL crimped dimensions are within specification, you have made a good assembly.

Hose		Fitting Type	Ferrule Position	Crimp Diameter ($\pm .010"$)	Die Set	Approximate Digital Setting	Positive Stop Spacer	Actual Crimper Setting
Type	I.D. (In.)							
6AC134a	5/16	6ACA	Centered	.690	MC40	180	W5	
8AC134a	13/32	8ACA	Centered	.780	MC41	220	B5	
10AC134a	1/2	10ACA	Centered	.890	MC42	190	W5	
12AC134a	5/8	12ACA	Centered	1.020	MC43	214	B5	

Automotive Service Hose Crimp Data

MobileCrimp® 4-20 Digital Dial and Positive Stop Crimpers

Hose		Stem		Ferrule		Crimp			Crimper			
Size (In.)	Type	Dash Size	Type	Descr.	Part No.	Hose Insertion Length +/- .03 (In.)	Length +/- .03 (In.)	Crimp OD +/- .010 (In.)	Die Set	Approx. MC4-20 Digital Setting ¹	User's Actual Setting	MC4-20 Spacer Ring
1/4	Charter® Air Hose	4 PC	4PC2F-2	80416	-	Full	0.725	31	420		R2	
3/8	Charter® Air Hose	6 PC	6PC2-2	80418	-	Full	0.800	32	190		W5	
1/2	Charter® Air Hose	8 PC	8PC2F-2	80419	-	Full	1.025	33	315		B4	
3/8	LP350	6 PC	6PC2F-2	80418	-	Full	0.800	22	205		W5	
3/8	LP350	6 PC	6PC2F-2	80418	-	Full	0.800	32	205		W5	
1/4	Multi-Use 1-Braid (19B)	4 PC	4PC2F-2	80416	-	Full	0.650	31	255		R4	
5/16	Multi-Use 1-Braid (19B)	5 PC	5PC1FA	80433	-	Full	0.770	31	495		R1	
5/16	Multi-Use 1-Braid (19B)	5 PC	5PC1FA	80433	-	Full	0.770	21	345		B3	
3/8	Multi-Use 1-Braid (19B)	6 PC	6PC2F-2	80418	-	Full	0.790	31	540		R5	
3/8	Multi-Use 1-Braid (19B)	6 PC	6PC2F-2	80418	-	Full	0.790	21	385		W2	
1/2	Multi-Use 1-Braid (19B)	8 PC	8PC2F-2	80419	-	Full	0.995	32	635		B1	
1/4	Multi-Use 2-Braid (19B)	4 PC	4PC2F-2	80416	-	Full	0.680	21	260		B4	
1/4	Multi-Use 2-Braid (19B)	4 PC	4PC2F-2	80416	-	Full	0.680	31	395		R2	
5/16	Multi-Use 2-Braid (19B)	5 PC	5PC2F-2	80418	-	Full	0.770	31	495		R1	
5/16	Multi-Use 2-Braid (19B)	5 PC	5PC2F-2	80418	-	Full	0.770	21	345		B3	
3/8	Multi-Use 2-Braid (19B)	6 PC	6PC2F-4	80462	-	Full	0.890	32	740		W3	
3/8	Multi-Use 2-Braid (19B)	6 PC	6PC2F-4	80462	-	Full	0.890	22	740		W3	
1/2	Multi-Use 2-Braid (19B)	8 PC	8PC2F-4	80463	-	Full	1.065	33	160		W5	
1/4	Safety Stripe® Air Hose	4 PC	4PC2F-2	80416	-	Full	0.725	31	420		R2	
3/8	Safety Stripe® Air Hose	6 PC	6PC2-2	80418	-	Full	0.800	32	190		W5	
1/2	Safety Stripe® Air Hose	8 PC	8PC2F-2	80419	-	Full	1.025	33	315		B4	

PowerClean™ Hose Crimp Data

MobileCrimp® 4-20 Digital Dial and Positive Stop Crimpers

Hose		Stem		Ferrule		Skive / Buff			Crimp		Crimper				
Size (In.)	Type	Work. Press. (psi)	Dash Size	Type	Description	Part No.	Length +/- .03 (In.)	Dia. (In.)	Hose Insertion Length +/- .03 (In.)	Length +/- .03 (In.)	Crimp OD +/- .010 (In.)	Die Set	Approx. MC4-20 Digital Read-out ¹	User's Actual Setting	MC4-20 Spacer Ring
1/2	PC2500	2500	8 G	MegaCrimp®	-	-	-	-	1.25	Full	1.010	33	265		W4
3/8	PC3000	3000	6 G	MegaCrimp®	-	-	-	-	0.93	Full	0.845	32	275		W4
3/8	PC3000	3000	6 G	MegaCrimp®	-	-	-	-	0.93	Full	0.845	22	275		W4
1/4	PC3500	3500	4 G	MegaCrimp®	-	-	-	-	0.93	Full	0.705	31	365		B3
1/4	PC3500	3500	4 G	MegaCrimp®	-	-	-	-	0.93	Full	0.705	21	230		W4
3/8	PC4000	4000	6 G	MegaCrimp®	-	-	-	-	0.93	Full	0.845	32	275		W4
3/8	PC4000	4000	6 G	MegaCrimp®	-	-	-	-	0.93	Full	0.845	22	275		W4
1/2	PC4000	4000	8 G	MegaCrimp®	-	-	-	-	1.25	Full	1.050	33	340		W3
3/8	PC5000	5000	6 G	MegaCrimp®	-	-	-	-	0.93	Full	0.890	32	370		B3
3/8	PC5000	5000	6 G	MegaCrimp®	-	-	-	-	0.93	Full	0.890	22	370		B3
1/4	PC6000	6000	4 G	MegaCrimp®	-	-	-	-	0.93	Full	0.740	31	435		W2
1/4	PC6000	6000	4 G	MegaCrimp®	-	-	-	-	0.93	Full	0.740	21	295		R3

¹ See Adjustment Procedure at beginning of MobileCrimp® section.

Industrial Hose Crimp Data

MobileCrimp® 4-20 Digital Dial and Positive Stop Crimpers

Hose			Stem		Ferrule		Skive / Buff		Crimp			Crimper		
Size (In.)	Description	Working Pressure (psi)	Dash Size	Type	Description	Part No.	Length +/- .03 (In.)	Dia. (In.)	Hose Insertion Length +/- .03 (In.)	Crimp O.D. +/- .010 (In.)	Die Set	MC 4-20 Digital Setting ¹	User's Actual Setting	MC 4-20 Spacer Ring
1	3619M	1000	16	PC	16PC2F-2	80424	1.500	WIRE	-	Full	1.620	36	385	R2
1-1/4	3619M	1000	20	PC	MegaCrimp®	-	-	-	1.75	Full	2.045	39	325	W1
1-1/4	3619M	1000	20	PC	20PC2F-2	80427	1.118	WIRE	-	Full	1.950	37	705	R1
1/4	6B	250	4	PC	4PC2F-2	80416	-	-	-	Full	0.670	31	295	B4
1/4	6B	315	4	PC	4PC2F-2	80416	-	-	-	Full	0.780	31	520	W1
1/4	6B	250	4	PC	4PC2F-2	80416	-	-	-	Full	0.670	21	170	W5
1/4	6B	315	4	PC	4PC2F-2	80416	-	-	-	Full	0.780	21	365	R2
5/16	6B	250	5	PC	5PC2F-2	80417	-	-	-	Full	0.720	31	395	R2
5/16	6B	250	5	PC	5PC2F-2	80417	-	-	-	Full	0.720	21	260	B4
3/8	6B	200	6	PC	6PC2F-2	80418	-	-	-	Full	0.750	31	455	B2
3/8	6B	250	6	PC	6PC2F-2	80418	-	-	-	Full	0.800	31	560	R5
3/8	6B	200	6	PC	6PC2F-2	80418	-	-	-	Full	0.750	21	310	W3
3/8	6B	250	6	PC	6PC2F-2	80418	-	-	-	Full	0.800	21	395	B2
1/2	6B	250	8	PC	8PC2F-2	80419	-	-	-	Full	0.980	33	205	B5
1/2	6B	200	8	PC	8PC2F-2	80419	-	-	-	Full	1.000	33	245	R4
1/2	6B	315	8	PC	8PC2F-4	80463	-	-	-	Full	1.100	33	440	B2
3/4	6B	250	12	PC	12PC2F-2	80423	-	-	-	Full	1.240	34	395	R2
3/4	6B	315	12	PC	12PC2F-4	80422	-	-	-	Full	1.370	35	310	R3
1	6B	315	16	PC	16PC2F-4	80425	-	-	-	Full	1.710	36	570	B1
1-1/4	6B	200	20	PC	20PC2F-2	80427	-	-	-	Full	2.020	38	445	B2
1/4	Adapta Flex™	200	4	PC	4PC2F-2	80416	-	-	-	Full	0.640	31	235	R4
1/4	Adapta Flex™	250	4	PC	4PC2F-2	80416	-	-	-	Full	0.640	31	235	R4
1/4	Adapta Flex™	300	4	PC	4PC2F-2	80416	-	-	-	Full	0.650	31	255	R4
5/16	Adapta Flex™	200	5	PC	5PC2F-2	80417	-	-	-	Full	0.725	31	405	R2
5/16	Adapta Flex™	200	5	PC	5PC2F-2	80417	-	-	-	Full	0.725	21	265	B4
3/8	Adapta Flex™	250	6	PC	6PC2F-2	80418	-	-	-	Full	0.720	31	395	R2
3/8	Adapta Flex™	200	6	PC	6PC2F-2	80418	-	-	-	Full	0.750	31	455	B2
3/8	Adapta Flex™	300	6	PC	6PC2F-2	80418	-	-	-	Full	0.770	31	495	R1
3/8	Adapta Flex™	250	6	PC	6PC2F-2	80418	-	-	-	Full	0.720	21	260	B4
3/8	Adapta Flex™	200	6	PC	6PC2F-2	80418	-	-	-	Full	0.750	21	310	W3
3/8	Adapta Flex™	300	6	PC	6PC2F-2	80418	-	-	-	Full	0.770	21	345	B3
1/2	Adapta Flex™	200	8	PC	8PC2F-2	80419	-	-	-	Full	0.990	32	570	B1
1/2	Adapta Flex™	250	8	PC	8PC2F-2	80419	-	-	-	Full	0.990	33	225	R4
1/2	Adapta Flex™	300	8	PC	8PC2F-2	80419	-	-	-	Full	1.000	33	245	R4
1/2	Adapta Flex™	200	8	PC	8PC2F-2	80419	-	-	-	Full	0.990	22	570	B1
5/8	Adapta Flex™	200	10	PC	12PC2F-2	80423	-	-	-	Full	1.120	34	160	W5
5/8	Adapta Flex™	250	10	PC	12PC2F-2	80423	-	-	-	Full	1.125	34	170	W5
3/4	Adapta Flex™	200	12	PC	12PC2F-2	80423	-	-	-	Full	1.290	34	495	W5
3/4	Adapta Flex™	250	12	PC	12PC2F-4	80422	-	-	-	Full	1.330	34	570	R4
3/4	Adapta Flex™	300	12	PC	12PC2F-4	80422	-	-	-	Full	1.335	35	240	R4
1	Adapta Flex™	150	16	PC	16PC2F-2	80424	-	-	-	Full	1.600	36	345	B3
1	Adapta Flex™	200	16	PC	16PC2F-4	80425	-	-	-	Full	1.650	36	450	B2
1	Adapta Flex™	300	16	PC	16PC2F-4	80425	-	-	-	Full	1.700	36	550	B1
3/8	Cyclone™	1000	6	PC	6PC2F-2	80418	-	-	-	Full	0.785	31	530	R5
3/8	Cyclone™	1000	6	PC	6PC2F-2	80418	-	-	-	Full	0.785	21	375	W2
1/2	Cyclone™	1000	8	PC	10PC2F-2B	80476	-	-	-	Full	1.040	33	325	R3
3/4	Cyclone™	1000	12	PC	12PC2F-4	80422	-	-	-	Full	1.350	35	270	B4
1/4	Duro Flex®	250	4	PC	4PC2F-2	80416	-	-	-	Full	0.650	31	255	R4
1/4	Duro Flex®	300	4	PC	4PC2F-4	80461	-	-	-	Full	0.720	31	395	R2
1/4	Duro Flex®	300	4	PC	4PC2F-4	80461	-	-	-	Full	0.720	21	260	B4
3/8	Duro Flex®	250	6	PC	6PC2F-2	80418	-	-	-	Full	0.820	32	225	B5
3/8	Duro Flex®	300	6	PC	6PC2F-2	80418	-	-	-	Full	0.850	32	285	W4
3/8	Duro Flex®	250	6	PC	6PC2F-2	80418	-	-	-	Full	0.820	22	225	B5
3/8	Duro Flex®	300	6	PC	6PC2F-2	80418	-	-	-	Full	0.850	22	285	W4
1/2	Duro Flex®	250	8	PC	8PC2F-2	80419	-	-	-	Full	1.010	33	265	W4
1/2	Duro Flex®	300	8	PC	10PC2F-2B	80476	-	-	-	Full	1.080	33	400	R2

¹ See Adjustment Procedure at beginning of MobileCrimp® section.



Industrial Hose Crimp Data

MobileCrimp® 4-20 Digital Dial and Positive Stop Crimpers

Hose			Stem		Ferrule		Skive / Buff		Crimp			Crimper		
Size (In.)	Description	Working Pressure (psi)	Dash Size	Type	Description	Part No.	Length +/-.03 (In.)	Dia. (In.)	Hose Insertion Length +/-.03 (In.)	Crimp O.D. +/-.010 (In.)	Die Set	MC 4-20 Digital Setting ¹	User's Actual Setting	MC 4-20 Spacer Ring
5/8	Duro Flex®	300	10	PC	12PC2F-2	80423	-	-	-	Full 1.140	34	200		B5
5/8	Duro Flex®	250	10	PC	12PC2F-2	80423	-	-	-	Full 1.185	34	285		B4
3/4	Duro Flex®	300	12	PC	12PC2F-4	80422	-	-	-	Full 1.310	34	535		B5
3/4	Duro Flex®	250	12	PC	12PC2F-4	80422	-	-	-	Full 1.330	35	235		R4
1	Duro Flex®	250	16	PC	16PC2F-4	80425	-	-	-	Full 1.670	37	115		R5
1-1/4	Duro Flex®	200	20	PC	20PC2F-2	80427	-	-	-	Full 2.020	37	855		W1
1/2	Heat Master® (Aramid)	500	8	PC	8PC2F-4	80463	-	-	-	Full 1.115	33	471		R1
3/4	Heat Master® (Aramid)	500	12	PC	12PCBHB1F	-	-	-	-	Full 1.350	35	270		B4
1/4	LP350	350	4	PC	4PC2F-2	80416	-	-	-	Full 0.695	31	355		W3
1/4	LP350	350	4	PC	4PC2F-2	80416	-	-	-	Full 0.695	21	214		R4
3/8	LP350	350	6	PC	6PC2F-2	80418	-	-	-	Full 0.800	22	205		W5
3/8	LP350	350	6	PC	6PC2F-2	80418	-	-	-	Full 0.800	32	205		W5
1/2	LP350	350	8	PC	8PC2F-2	80419	-	-	-	Full 0.995	33	240		R4
3/4	LP350	350	12	PC	12PCBHB-1F	-	-	-	-	Full 1.315	35	205		B5
1	LP350	350	16	PC	16PC2F-4	80425	-	-	-	Full 1.625	36	397		W2
3/16	Premo Flex®	250	3	PC	3PC2F-2	80415	-	-	-	Full 0.655	31	265		W4
1/4	Premo Flex®	250	4	PC	4PC2F-2	80416	-	-	-	Full 0.645	31	245		R4
1/4	Premo Flex®	315	4	PC	4PC2F-2	80416	-	-	-	Full 0.670	31	295		B4
1/4	Premo Flex®	315	4	PC	4PC2F-2	80416	-	-	-	Full 0.670	21	170		W5
5/16	Premo Flex®	250	5	PC	5PC2F-2	80417	-	-	-	Full 0.630	31	215		B5
5/16	Premo Flex®	315	5	PC	6PC2F-2	80418	-	-	-	Full 0.755	31	465		R1
5/16	Premo Flex®	315	5	PC	6PC2F-2	80418	-	-	-	Full 0.755	21	320		W3
3/8	Premo Flex®	250	6	PC	6PC2F-2	80418	-	-	-	Full 0.770	31	495		R1
3/8	Premo Flex®	315	6	PC	6PC2F-2	80418	-	-	-	Full 0.810	32	205		B5
3/8	Premo Flex®	250	6	PC	6PC2F-2	80418	-	-	-	Full 0.770	21	345		B3
3/8	Premo Flex®	315	6	PC	6PC2F-2	80418	-	-	-	Full 0.810	22	205		B5
1/2	Premo Flex®	250	8	PC	8PC1FA	80435	-	-	-	Full 0.980	33	205		B5
1/2	Premo Flex®	315	8	PC	8PC1FA	80435	-	-	-	Full 1.010	33	265		W4
5/8	Premo Flex®	250	10	PC	12PC2F-2	80423	-	-	-	Full 1.145	34	210		B5
5/8	Premo Flex®	315	10	PC	10PC1FA	80436	-	-	-	Full 1.190	34	295		R3
3/4	Premo Flex®	250	12	PC	12PC2F-4	80422	-	-	-	Full 1.320	35	215		R4
3/4	Premo Flex®	315	12	PC	12PC2F-4	80422	-	-	-	Full 1.360	35	290		R3
1	Premo Flex®	250	16	PC	16PC2F-4	80425	-	-	-	Full 1.670	37	115		R5
1-1/4	Premo Flex®	250	20	PC	20PC2F-4	80426	-	-	-	Full 1.990	38	385		R2
1/4	Terminator®	501	4	PC	4PC2F-2	80416	-	-	-	Full 0.680	31	315		R3
1/4	Terminator®	501	4	G	MegaCrimp®	-	-	-	0.94	Full 0.740	31	435		W2
1/4	Terminator®	501	4	PC	4PC2F-2	80416	-	-	-	Full 0.680	21	185		B5
1/4	Terminator®	501	4	G	MegaCrimp®	-	-	-	0.94	Full 0.740	21	295		R3
3/8	Terminator®	501	6	PC	6PC2F-4	80462	-	-	-	Full 0.870	32	325		R3
3/8	Terminator®	501	6	G	MegaCrimp®	-	-	-	0.94	Full 0.920	32	430		R2
3/8	Terminator®	501	6	PC	6PC2F-4	80462	-	-	-	Full 0.870	22	325		R3
3/8	Terminator®	501	6	G	MegaCrimp®	-	-	-	0.94	Full 0.920	22	430		R2
1/2	Terminator®	501	8	G	MegaCrimp®	-	-	-	1.25	Full 1.050	33	340		W3
1/2	Terminator®	501	8	PC	8PC2F-4	80463	-	-	-	Full 1.060	33	360		B3
3/4	Terminator®	501	12	PC	12PC2F-4	80422	-	-	-	Full 1.360	35	290		R3
3/4	Terminator®	501	12	G	MegaCrimp®	-	-	-	1.50	Full 1.450	35	460		B2
1	Terminator®	501	16	PC	16PC2F-4	80425	-	-	-	Full 1.660	36	470		W1
1	Terminator®	501	16	G	MegaCrimp®	-	-	-	1.75	Full 1.785	37	355		W3
3/8	Thermo AG® 570	570	6	PC	6PC2F-2	80418	-	-	-	Full 0.750	31	455		B2
3/8	Thermo AG® 570	570	6	PC	6PC2F-2	80418	-	-	-	Full 0.750	21	600		W3
1/2	Thermo AG® 570	570	8	PC	6PC2F-2	80463	-	-	-	Full 0.960	33	162		R5
3/8	Thermo AG® 800	800	6	PC	6PC2F-2	80418	-	-	-	Full 0.780	32	143		W1
3/8	Thermo AG® 800	800	6	PC	6PC2F-2	80418	-	-	-	Full 0.780	22	143		W1
1/2	Thermo AG® 800	800	8	PC	6PC2F-2	80463	-	-	-	Full 0.960	33	162		R5

¹ See Adjustment Procedure at beginning of MobileCrimp® section.

OmniCrimp® 21



Power Crimp® 3000B



Also includes PC2001 data.

Calibration Procedure

(For more detail, see Crimper Operators' Manual.)

Power Crimp® 3000B

NOTE: Check calibration After Every 100 Crimps

The PC3000B Crimper may be calibrated with one of the hose and coupling combinations shown in Table 1.

Hose:	Stem:	Product to Crimp:	Setting:
8G2	MegaCrimp®	8G MegaCrimp coupling	2-1/4
8M2T®	MegaCrimp	8G MegaCrimp coupling	2-1/4

Table 1



Photo 1



Photo 2

1. Install the "33" die set. Ensure die is well lubricated.
 2. Set needle on switch box to 2 1/4 (See Photo 1). (The gauge setting is adjusted by always moving indicator upward to desired setting. Example: Change setting from 2 to 2-1/4, move the indicator to 3, then back up to 2-1/4. To change from 3 to 2, simply move the indicator directly up to 2.)
 3. Insert assembly and press crimp switch.
 4. When crimp is complete the pump will automatically shut off and ram will return to start position.
 5. Remove assembly and measure crimp diameter across all four flats. The average of the four dimensions should measure 1.000" ($\pm .003"$). To properly measure crimp diameter, refer to the Hose Assembly Guide instructions, Item #9, at the beginning of this manual.
 6. If ferrule is not 1.000" ($\pm .003"$) crimp diameter, you must move the control box (See Photo 2).
 - a. To increase crimp O.D. – Loosen the two clamps holding switch box in place and move switch box down. (Moving crimp box by 1/8" changes the crimp O.D. by .033".) Tighten clamps after moving.
 - b. To decrease crimp O.D. – Loosen the two clamps holding switch box in place and move switch box up. (Moving crimp box by 1/8" changes the crimp O.D. by .033".) Tighten clamps after moving.
- CAUTION – Do not over tighten bolts in clamps.
7. Repeat steps 3 thru 5 to verify correct crimp diameter.

OmniCrimp® 21

The OmniCrimp® 21 crimper is a self-calibrating machine. Each time the machine is turned on a self-calibration sequence is performed automatically. If you are experiencing a consistent problem of adjusting our published approximate settings, contact Gates Product Application at (303) 744-5070. A calibration check procedure is available.

Power Crimp® 2001

See Operators Manual for details on calibration procedures for the Power Crimp 2001 crimper. This manual can be used for crimp information for the PC 2001 crimper. The crimp O.D. and the die set information in this manual applies to the PC 2001 crimper using the Gates FP dies. **Do not use this manual if using the TF or other non-Gates dies with the PC 2001 crimper.**

Note: Die sets referenced in this manual do not have the FP prefix. (i.e., die set 30 = FP30 for the PC 2001 crimper).

Adjustment Procedures

CAUTION: The Digital Readout Settings are Approximate! Machining tolerances exist for each crimper, die set, and supporting piece of equipment which will effect your actual setting. Always check the Crimp Diameter to assure that it is within the published limits and record your actual crimper setting to achieve the specified crimp diameter in the user space provided for future use.

Power Crimp® 3000B

Setting Adjustment

The setting is adjusted by always moving the indicator upward to the desired setting. Example: to change the setting from 2 to 3, first lower the indicator to 4, then move it back up to 3. To change from 3 to 2, simply move the indicator directly to 2.

Controller Adjustment

To obtain a smaller crimp diameter (Crimp OD), change the setting to a smaller number, or vice versa. Changing the setting by 1 (Example: 1 to 2) will change crimp diameter by .030".

$$\text{Adjusted Setting} = \left(\frac{\text{Target Crimp OD}}{\text{Measured Crimp OD}} - 1 \right) \times 30 + \text{Published Approx. Setting}$$

OmniCrimp® 21

Digital Readout Adjustment

To obtain a smaller crimp diameter, change the digital readout to a larger number. To obtain a larger crimp diameter, use a smaller number. Changing the digital readout by .005 (Example: 1.000 to 1.005) will change the crimp diameter by .005".

$$\text{Adjusted Setting} = \left(\frac{\text{Measured Crimp OD}}{\text{Target Crimp OD}} - 1 \right) + \text{Published Approx. Setting}$$

Setting Digital Readout

The digital readout is adjusted by pressing the Crimp-Decrease or Crimp-Increase button.

PC 2001

Setting Adjustment

Reference Operator's manual for PC 2001 Adjustment Procedure.

PC 2001 Die Closures for Programming the Minimum Swaging Diameter

To convert the Crimp Outer Diameters listed in this manual to the metric measurements used in many Finn Power machines, multiply the Crimp Outer Diameter value listed for the particular hose/coupling combination by 25.4. Example: For the -6M3K with the -6 MegaCrimp® coupling, the Crimp Outer Diameter is 0.810 inch. When you multiply 0.810 inch by 25.4, this gives a value of 20.574 or 20.6 mm.

DIE SET	Closure (In.)	Closure (mm)
FP 31	0.600	15.2
FP 21	0.660	16.8
FP 32	0.780	19.8
FP 22	0.780	19.8
FP 33	0.950	24.1
FP 34	1.110	28.2
FP 35	1.280	32.5
FP 36	1.490	37.8
FP 37	1.675	42.5
FP 38	1.860	47.2
FP 39	2.020	51.3
FP 310	2.180	55.3
FP 311	2.320	58.9
FP 312	2.690	68.3
FP 313	2.800	71.1
FP 314	3.000	76.2
FP 301	0.420	10.7

Crimp Tooling

OmniCrimp® 21 and Power Crimp® 3000B Dies Die Sets

Die Set	21/ 31	22/ 32	33	34	35	37	39
OmniCrimp Part No.	78263/ 78294	78264/ 78295	78296	78276	78277	78279	78281
OmniCrimp Product No.	7482-1222/ 7482-0730	7482-1223/ 7482-0731	7482-0732	7482-0672	7482-0673	7482-0716	7482-0717
3000B Part No.	78358/ 78305	78359/ 78306	78307	78308	78309	78311	78313
3000B Product No.	7482-1224/ 7482-6515	7482-1225/ 7482-6516	7482-6517	7482-6518	7482-6519	7482-6582	7482-7011
Die Set	310L¹	311	312	313	314	24C4	32C4
OmniCrimp Part No.	78298	78284	78285	78286	78287	78292	78293
OmniCrimp Product No.	7482-1156	7482-0721	7482-0677	7482-0722	7482-0723	7482-0724	7482-0725
3000B Part No.	78357	78316	78317	78318	78319	78355	78356
3000B Product No.	7482-1127	7482-7023	7482-7029	7482-6523	7482-0298	7482-6583	7482-6584

¹ 310L supersedes 310 die. (Applies to OmniCrimp 21 / PC 3000B / PC 2001)

Specialty and Automotive Dies

Die Set	OM44	OM331	301	6AC	8AC	10AC	12AC
OmniCrimp Part No.	78594	78297	78282	78288	78289	78290	78291
OmniCrimp Product No.	7482-1263	7482-0733	7482-0718	7482-0726	7482-0727	7482-0728	7482-0729
3000B Part No.	N/A	N/A	78334	78300	78301	78302	78303
3000B Product No.	N/A	N/A	7482-5009	7482-0550	7482-0551	7482-0552	7482-0553
Use	Power Steering	Clamp Collars	Grease Fitting	6AC134a	8AC134a	10AC134a	12AC134a

Die Tooling Supplies

Item	Part No.	Product No.
3oz Jar Molykote G Paste	78755	7482-0311
Stainless Steel Dial Caliper	78215	7369-0320



Hydraulic Hose Crimp Data

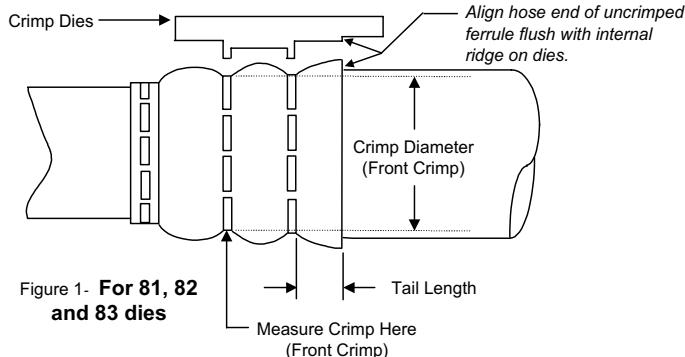
OmniCrimp® 21, Power Crimp® 3000B and Power Crimp® 2001 (FP) Dies

Hose			Stem	Ferrule		Skive/Buff		Crimp			Crimper			
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (In.)	Dia. (In.)	Insertion Length +/- .03 (In.)	Crimp O.D. +/- .010 (In.)	Die Set	PC 3000B Approx. Setting ¹	Omni21 Approx. Setting ¹	User's Actual Setting	
4 M5K	1/4	4PC-SS	4PC1F-M2SS	85027	-----	-----	-----	FULL	0.660	31	2 1/4	1.412		
4 MCPB+	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	21	3	1.410		
4 MCPB+	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	31	5	1.334		
6 MCPB+	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	22	4 1/4	1.354		
6 MCPB+	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	32	4 1/4	1.354		
8 MCPB+	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.060	33	3 3/4	1.367		
12 MCPB+	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	35	3 1/4	1.363		
16 MCPB+	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.800	37	4 3/4	1.358		
20 MCPB+	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.125	39	3	1.384		
4 MCPB PLUS-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	21	3	1.410		
4 MCPB PLUS-MTF	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.740	31	5	1.334		
6 MCPB PLUS-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	22	4 1/4	1.354		
6 MCPB PLUS-MTF	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.895	32	4 1/4	1.354		
8 MCPB PLUS-MTF	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.060	33	3 3/4	1.367		
12 MCPB PLUS-MTF	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.395	35	3 1/4	1.363		
16 MCPB PLUS-MTF	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.800	37	4 3/4	1.358		
20 MCPB PLUS-MTF	1 1/4	20G	MegaCrimp	-----	-----	-----	1.75	FULL	2.125	39	3	1.384		
4 MEGATECH ACR	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	21	1 3/4	1.445		
4 MEGATECH ACR	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.700	31	3 1/2	1.373		
6 MEGATECH ACR	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	22	1.436	1.750		
6 MEGATECH ACR	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	32	1.436	1.750		
8 MEGATECH ACR	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	0.980	33	1 3/4	1.444		
10 MEGATECH ACR	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.160	34	1 3/4	1.423		
24 MEGATECH ACR	1 1/2	24PC	24PC1FS	80491	-----	-----	FULL	2.240	39	6 1/4	2.240			
32 MEGATECH ACR	2	32PC	32PC1FS	80492	-----	-----	FULL	2.845	313	3/4	1.456			
3 RLA	3/16	3PC	3PC2F-2	80415	-----	-----	FULL	0.640	31	1 3/4	1.432			
4 RLA	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.720	21	2	1.427		
4 RLA	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.720	31	4	1.353		
6 RLA	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.860	22	3 1/4	1.388		
6 RLA	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.860	32	3 1/4	1.388		
8 RLA	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	1.080	33	4 1/2	1.348		
10 RLA	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.140	34	1	1.450		
12 RLA	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.430	35	4 1/4	1.329		
16 RLA	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.690	37	1 1/4	1.468		
32 SHR	2	32PCS	32PCS1F-G3K	81282	-----	-----	FULL	2.950	313	4	1.343			
32 SHR	2	32PCS	32PCS2F	80758	2.875	WIRE	FULL	2.785	312	3	1.398			
4 TR500	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.680	21	3/4	1.462		
4 TR500	1/4	4G	MegaCrimp	-----	-----	-----	0.93	FULL	0.680	31	3	1.393		
6 TR500	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	22	1 1/2	1.440		
6 TR500	3/8	6G	MegaCrimp	-----	-----	-----	0.93	FULL	0.810	32	1 1/2	1.440		
8 TR500	1/2	8G	MegaCrimp	-----	-----	-----	1.25	FULL	0.980	33	1 3/4	1.440		
10 TR500	5/8	10G	MegaCrimp	-----	-----	-----	1.12	FULL	1.130	33	6 1/4	1.294		
12 TR500	3/4	12G	MegaCrimp	-----	-----	-----	1.50	FULL	1.300	35	1/2	1.462		
16 TR500	1	16G	MegaCrimp	-----	-----	-----	1.75	FULL	1.580	36	3 1/4	1.403		

Power Crimp 3000B

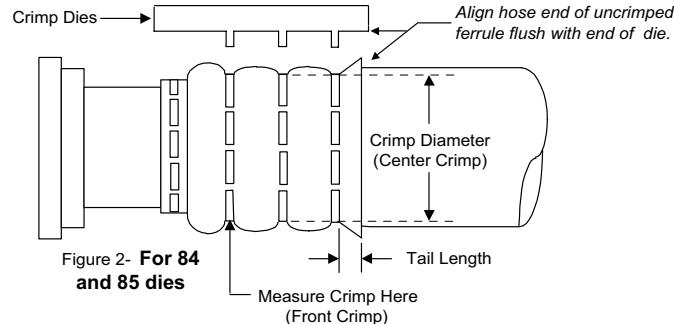
GL Coupling Crimping Instructions

To achieve the proper tail length, line up the hose end of the ferrule with "locating step" on the die inside diameter (I.D.) for -12, -16 and -20G4H+ (see Figure 1) prior to crimping. See below for -24 and -32G4H (see Figure 2).



Hose			Stem	Ferrule		Skive/Buff		Crimp			Crimper		
Dash Size	Description	Size (in.)	Type	Part No.	Length +/- .03 (In.)	Dia. (In.)	Insertion Length +/- .03 (In.)	Tail Length +/- .1 (In.)	Crimp OD +/- .01 (In.)	Die Set	PC3000B Digital Setting	User's Actual Setting	
12	GMV	3/4	12GL	1-pc GL	-----	-----	1.75	0.50	1.12	81	1 3/4		
16	GMV	1	16GL	1-pc GL	-----	-----	2.125	0.60	1.36	82	1 3/4		
20	GMV	1 1/4	20GL	1-pc GL	-----	-----	2.25	0.50	1.66	83	2 1/4		

To achieve the proper tail length, line up the hose end of the ferrule with the top of the die (see Figure 1) prior to crimping. This is for sizes -24 and -32.



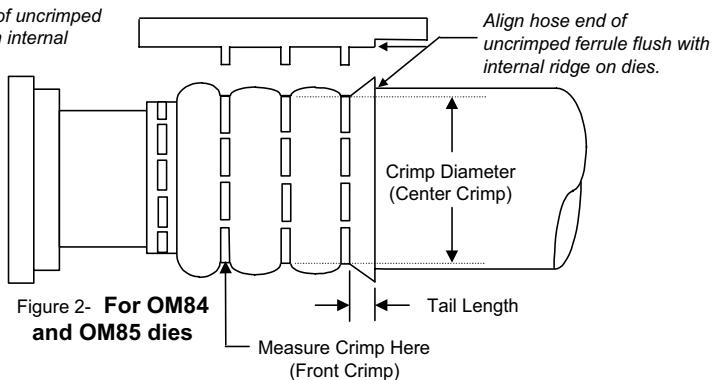
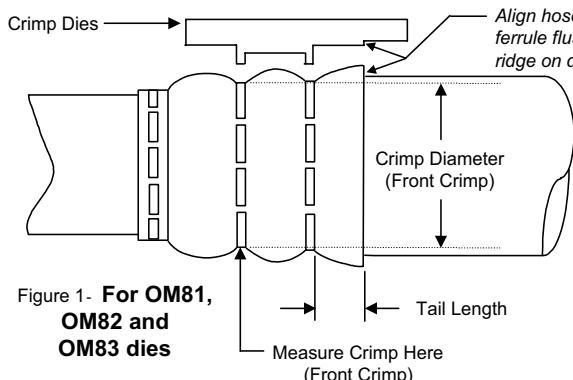
Hose			Stem	Ferrule		Skive/Buff		Crimp			Crimper		
Dash Size	Description	Size (In.)	Type	Part No.	Length +/- .03 (In.)	Dia. (In.)	Insertion Length +/- .03 (In.)	Tail Length +/- .1 (In.)	Crimp OD +/- .01 (In.)	Die Set	PC3000B Digital Setting	User's Actual Setting	
24	GMV	1 1/2	24GL	1-pc GL	-----	-----	2.375	0.50	1.915	84	2 3/4		
32	GMV	2	32GL	1-pc GL	-----	-----	2.750	0.50	2.430	85	2 1/4		
24	MEGATECH ACR	1 1/2	24GL	1-pc GL	-----	-----	2.375	0.50*	1.915	84	2 3/4		
32	MEGATECH ACR	2	32GL	1-pc GL	-----	-----	2.750	0.50*	2.410	85	2 1/4		

*Note: The Tail Length Tolerance for the MEGATECH ACR HOSE is +/- 0.020(in.)!

OmniCrimp® 21

GL Coupling Crimping Instructions

To achieve the proper tail length, line up the hose end of the ferrule with "locating step" on the die inside diameter (I.D.) (See Figure 1 or 2 depending on die) prior to crimping. Care needs to be taken to be sure die fingers are all the way forward and locked in place in die shoes.



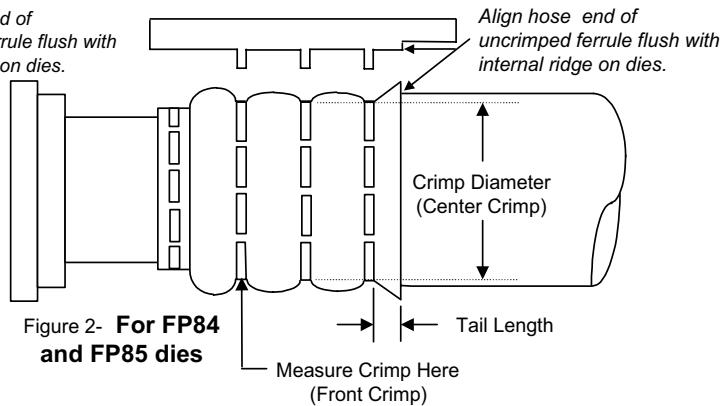
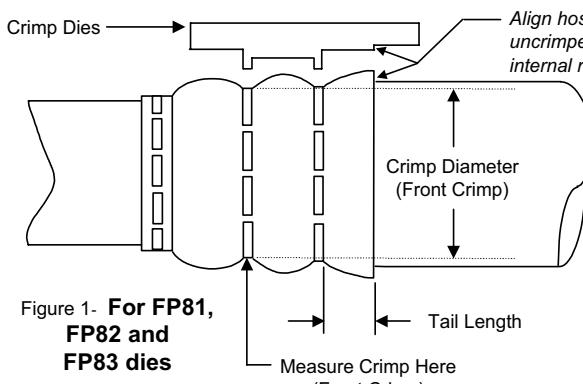
Hose			Stem	Ferrule		Skive/Buff	Crimp			Crimper				
Dash Size	Description	Size (In.)		Type	Description		Length +/- .03 (In.)	Dia. (In.)	Insertion Length +/- .03 (In.)	Tail Length +/- .1 (In.)	Crimp OD +/- .01 (In.)	Die Set	OMNI Digital Setting	User's Actual Setting
12	GMV	3/4	12GL	1-pc GL	-----	-----	-----	-----	1.750	0.50	1.120	OM81	1.430	
16	GMV	1	16GL	1-pc GL	-----	-----	-----	-----	2.125	0.60	1.360	OM82	1.425	
20	GMV	1 1/4	20GL	1-pc GL	-----	-----	-----	-----	2.250	0.50	1.660	OM83	1.420	
24	GMV	1 1/2	24GL	1-pc GL	-----	-----	-----	-----	2.375	0.50	1.915	OM84	1.400	
32	GMV	2	32GL	1-pc GL	-----	-----	-----	-----	2.750	0.50	2.430	OM85	1.400	
24	MEGATECH ACR	1 1/2	24GL	1-pc GL	-----	-----	-----	-----	2.375	0.50*	1.915	OM84	1.400	
32	MEGATECH ACR	2	32GL	1-pc GL	-----	-----	-----	-----	2.750	0.50*	2.410	OM85	1.390	

*Note: The Tail Length Tolerance for the MEGATECH ACR HOSE is +/-0.020(in.)!

Power Crimp® 2001

GL Coupling Crimping Instructions

To achieve the proper tail length, line up the hose end of the ferrule with "locating step" on the die inside diameter (I.D.) (See Figure 1 or 2 depending on die) prior to crimping. Care needs to be taken to be sure die fingers are all the way forward and locked in place in die shoes.



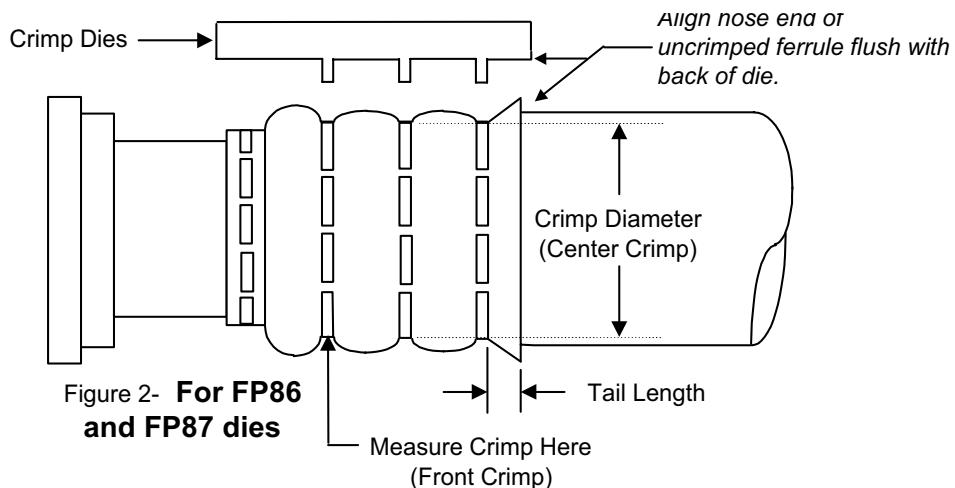
Hose			Stem	Ferrule		Skive/Buff		Crimp			Crimper	
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (In.)	Dia. (In.)	Insertion Length +/- .03 (In.)	Tail Length +/- .01 (In.)	Crimp OD +/- .01 (In.)	Die Set	User's Actual Setting
12	GMV	3/4	12GL	1-pc GL	-----	-----	-----	1.750	0.50	1.12	FP81	
16	GMV	1	16GL	1-pc GL	-----	-----	-----	2.125	0.60	1.36	FP82	
20	GMV	1 1/4	20GL	1-pc GL	-----	-----	-----	2.250	0.50	1.66	FP83	
24	GMV	1 1/2	24GL	1-pc GL	-----	-----	-----	2.375	0.50	1.915	FP84	
32	GMV	2	32GL	1-pc GL	-----	-----	-----	2.750	0.50	2.43	FP85	
24	MEGATECH ACR	1 1/2	24GL	1-pc GL	-----	-----	-----	2.375	0.50*	1.915	FP84	
32	MEGATECH ACR	2	32GL	1-pc GL	-----	-----	-----	2.750	0.50*	2.41	FP85	

*Note: The Tail Length Tolerance for the MEGATECH ACR HOSE is +/-0.020(in.)!

Power Crimp® 2001

G4H Coupling Crimping Instructions

To achieve the proper tail length, line up the hose end of the ferrule with the top of the die (See Figure 2) prior to crimping. This is for sizes -24 and -32.



Hose			Stem	Ferrule		Skive/Buff		Crimp			Crimper	
Dash Size	Description	Size (In.)	Type	Description	Part No.	Length +/- .03 (In.)	Dia. (In.)	Insertion Length +/- .03 (In.)	Tail Length +/- .1 (In.)	Crimp OD +/- .01 (In.)	Die Set	User's Actual Setting
40	GMV(G4H)	2 1/2	40G4H	1-pc G4H	-----	-----	-----	2.375	0.425	2.900	FP86	
48	GMV(G4H)	3	48G4H	1-pc G4H	-----	-----	-----	2.750	0.460	3.470	FP87	
56	GMV(G4H)	3 1/2	56G4H	1-pc G4H	-----	-----	-----	3.640	0.625	4.000	FP88	
64	GMV(G4H)	4	64G4H	1-pc G4H	-----	-----	-----	4.040	0.550	4.500	FP89	
40	MEGATECH ACR	2 1/2	40G4H	1-pc G4H	-----	-----	-----	2.375	0.425*	2.800	FP86	
48	MEGATECH ACR	3	48G4H	1-pc G4H	-----	-----	-----	2.750	0.460*	3.410	FP87	

*Note: The Tail Length Tolerance for the MEGATECH ACR HOSE is +/-0.020(in.)!

OmniCrimp® 21

Clamp Collar Crimping Instructions

Care must be taken when crimping clamp collars onto a hydraulic hose. If crimp is too tight, hose will be crushed, dramatically reducing its service life. If crimp is too loose, collar could slide along hose's length causing abrasion and eventual hose cover failure.

Remember: Clamp collars must be crimped before the hose couplings.

Use the following instructions to determine crimp diameter, which can then be used to find crimping setting in Table 2. The required clamp collar for a specific hydraulic hose is provided in Table 1.

1. Measure hose's outside diameter at the location where clamp collar will be crimped. This can be accomplished by using a pie tape or by using the average hose outside diameter measured with a dial caliper.
2. Obtain crimp diameter by adding hose outside diameter to twice the clamp collar wall thickness (see formula below).



$$\text{Crimp Diameter} = (\text{Hose O.D.}) + [2 \times .065 \text{ (Clamp Collar Wall Thickness)}]$$

When crimping clamp collar, the crimp die should be located in the center of the collar, which will result in a 1/8" flare on each side of the collar.

Table 1

Description	Part Number	Product Number	Hydraulic Hose Applications	Length (In.)	OmniCrimp® Die
CC1.12	80276	7334-45805	10M2T, 10G2	2.250	OM331
CC1.20	80279	7334-37015	10M2T, 10G2	1.525	OM331
CC1.25	80277	7334-45885	12M2T, 12G2, 12M4K	2.000	OM331
CC1.37	80278	7334-45895	12C12, 12G4K	2.000	OM331

Table 2

OM331 Die

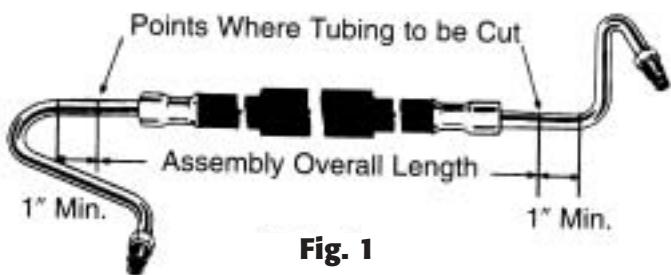
Crimp Diameter	Approx. Setting	Crimp Diameter	Approx. Setting	Crimp Diameter	Approx. Setting
1.050	1.320	1.170	1.200	1.290	1.085
1.055	1.315	1.175	1.195	1.295	1.080
1.060	1.310	1.180	1.190	1.300	1.075
1.065	1.305	1.185	1.185	1.305	1.070
1.070	1.300	1.190	1.180	1.310	1.065
1.075	1.295	1.195	1.175	1.315	1.060
1.080	1.290	1.200	1.170	1.320	1.055
1.085	1.285	1.205	1.165	1.325	1.050
1.090	1.280	1.210	1.160	1.330	1.045
1.095	1.275	1.215	1.155	1.335	1.040
1.100	1.270	1.220	1.150	1.340	1.035
1.105	1.265	1.225	1.145	1.345	1.030
1.110	1.260	1.230	1.140	1.350	1.025
1.115	1.255	1.235	1.135	1.355	1.020
1.120	1.250	1.240	1.130	1.360	1.015
1.125	1.245	1.245	1.127	1.365	1.010
1.130	1.240	1.250	1.123	1.370	1.005
1.135	1.235	1.255	1.118	1.375	1.000
1.140	1.230	1.260	1.115	1.380	0.995
1.145	1.225	1.265	1.110	1.385	0.990
1.150	1.220	1.270	1.105	1.390	0.985
1.155	1.215	1.275	1.100	1.395	0.980
1.160	1.210	1.280	1.095	1.400	0.975
1.165	1.205	1.285	1.090	1.405	0.970

OmniCrimp® 21

Power Steering Male Flareless Assembly Instructions

Hose Preparation and Assembly

1. Measure Tube O.D.
2. Select the proper Male Flareless coupling for the application.
3. Determine the length of the replacement assembly. Measure the distance between the points where the tubing is to be cut. See Fig. 1.



NOTE: Tubing must be cut at 1" from the start of any bend. Read "Tubing Preparation Assembly" section on next page before cutting.

4. Determine the necessary cut length of hose.

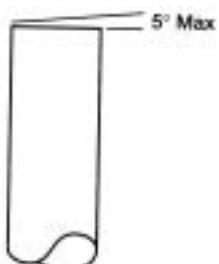
$$\text{Cut Length} = \frac{\text{Assembly Overall Length}}{\text{Cutoff Dimension (Coupling 1)}} - \frac{\text{Cutoff Dimension (Coupling 2)}}{1"}$$

(Cutoff dimensions are in Table below.)

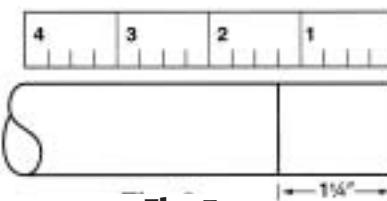
Cutoff Dimensions For Power Steering Couplings

Part No.	Description	Cutoff (In.)
80730	6PS-4MFA	.996
80731	6PS-5MFA	.996
80732	6PS-6MFA	1.012
80735	6PS-M8MFA	.934
80736	6PS-M10MFA	.973
80737	6PS-M12MFA	.973

5. Cut hose to the calculated cut length. End must be square ($\pm 5^\circ$). See Fig. 2.



6. Mark the hose 1-1/4" ($\pm 1/32"$) from the end of the hose with a marker pen. Do not damage hose. See Fig. 3.



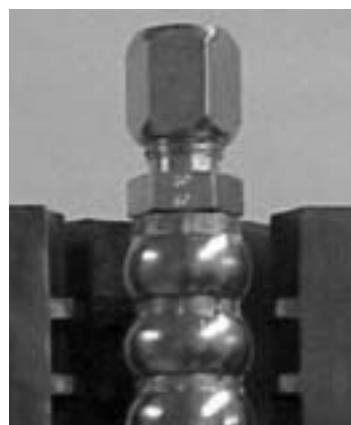
7. Insert a 6PS coupling into the hose until the end of the ferrule is even with the mark. (See Fig. 4.)



8. Place the power steering die in the crimper. Use setting as shown below:

Die Set	Setting
Power Steering	1.425

9. Insert the properly prepared hose and coupling into the crimper. Line up the top of the die with the bottom of the stem hex. (See Fig. 5.)



10. Place no-notch cone on die fingers. Press the crimp button. When you hear the pump pressurize or the light and buzzer sound, release your finger from the crimp button. The crimp is now complete.

OmniCrimp® 21

Power Steering Male Flareless Assembly Instructions (cont'd)

11. Measure the Crimp O.D. per Fig. 6. Crimp O.D. must be within the specified tolerance.

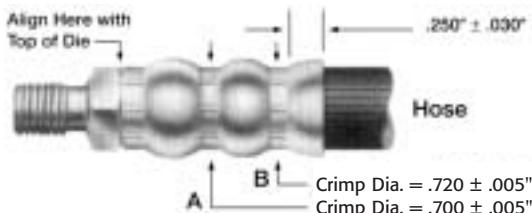


Fig. 6

12. Check the assembly to make sure the correct overall length has been obtained.
 13. Inspect the assembly to make sure it has a clean bore and no internal obstructions. Clean if necessary.

Tubing Preparation Assembly

1. Tube End Condition

- Before cutting tube, mark both ends of the assembly so that it can be properly reassembled. These marks must be made on the tubing beyond the point where the tubing will be cut. Use a marker pen to mark the tubing so the surface won't be scratched.
- Tube end must be cut squarely ($\pm 5^\circ$).
- Smooth the tube inside and out by removing all the burrs and rough edges with steel wool. Clean all metal particles from inside the tube.
- The bare end of the tube must be long enough for the nut and sleeve to be placed over the tube. (1" minimum length before the start of any bend.)
- There also must be sufficient tube length for the tube end to seat against the shoulder in the thread end of the stem. (1" minimum length before the start of any bend.)

2. Nut and Sleeve Placement (Tube End)

- Install the hex nut over the tube, positioned so the shoulder end is placed on the tube first. The thread end will then face the hose assembly.
- Place the sleeve on the tube so the tapered end will face the hose assembly.



3. Connect to the Tube End

(Preliminary Connection)

- A. Insert the tube into the thread end of the hose assembly until it bottoms against the shoulder.



- B. Screw the hex nut to the thread end until finger tight.
 C. Using a wrench, tighten approximately 1 turn ($\pm 1/4$ turn) to preset.

4. Inspect

- Disassemble and inspect compression of the sleeve on the tube. The sleeve must be compressed sufficiently on the tube so it is not easily removed.
- The tube end will be slightly distorted from butting against the internal shoulder. NOTE: Makeup of the correct connection is critical for proper use and safety.

5. Final Assembly

- Insert the tube into the thread end of the hose assembly.
- With a wrench, tighten down until a sudden increase in torque is felt. Turn nut approximately 1/6 turn (but no more than 1/3 turn) to create a seal between the sleeve, tube and seat of the stem.
- CAUTION: Overtightening may cause stripped threads and/or collapse of the tube.
- Before tightening the second end, line up the two marks on the tubing to assure proper orientation.



OmniCrimp® 21

Crimp Data for Gates PolarSeal® Hose

With G45 Series (ACA) Couplings

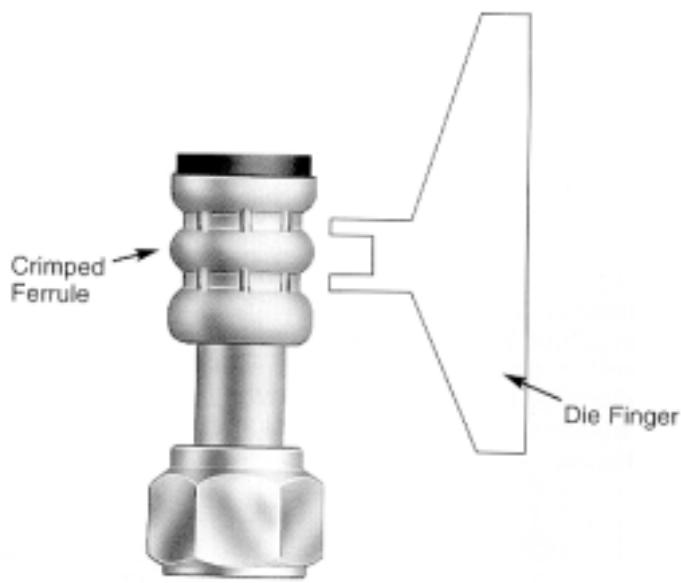
Gates recommends only those hose and coupling combinations specified in the Gates Hydraulic Products Catalogs. Gates disclaims any liability for any hose assemblies which have not been produced in conformance with Gates' assembly recommendations.

Changing Digital Readout

To set the RETRACT position, hold the hose assembly to be crimped in front of the die fingers. Twist the JOG switch in the direction of the RETRACT arrow and hold it until the die fingers open enough to allow easy insertion of the assembly.

Release the switch. This position can be changed by pressing the INCREASE or DECREASE buttons beneath the RETRACT display.

Use the INCREASE or DECREASE buttons beneath the start crimp display to change crimp settings.



Crimp Diameter

Should the actual crimp diameter NOT be within the recommended crimp tolerance, a slight adjustment to the "Approximate Setting" or digital readout may be necessary.

Changing the CRIMP setting by one number will change crimp diameter by approximately .001". After nominal crimp diameter is obtained, check at least every tenth crimp to ensure that it is within recommended tolerances.

IMPORTANT

To assure a quality assembly, check the FIRST assembly of each run. Measure the crimped O.D. and compare it to the figure listed in the "Crimp Diameter" column. If ACTUAL crimped dimensions are within specification, you have made a good assembly.

Hose		Fitting Type	Crimp Diameter (±.010")	Ferrule Position	Die Set	Approx. Digital Readout (±.05")	Actual Crimper Setting
Type	I.D. (In.)						
6AC134a	5/16	6ACA	.690	Centered	OM6AC	1.455	
8AC134a	13/32	8ACA	.780	Centered	OM8AC	1.435	
10AC134a	1/2	10ACA	.890	Centered	OM10AC	1.450	
12AC134a	5/8	12ACA	1.020	Centered	OM12AC	1.440	

Power Crimp® 3000B

Crimp Data for Gates PolarSeal® Hose With G45 Series (ACA) Couplings

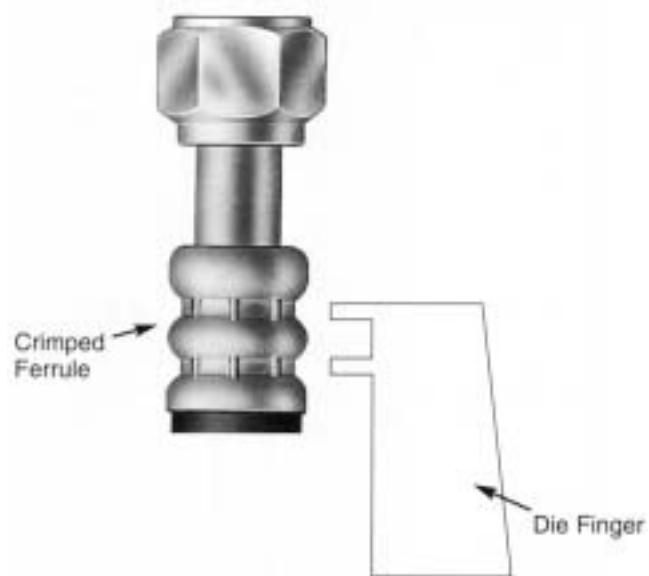
Gates recommends only those hose and coupling combinations specified in the Gates Hydraulic Products Catalogs. Gates disclaims any liability for any hose assemblies which have not been produced in conformance with Gates' assembly recommendations.

Gauge Setting

The gauge setting is adjusted by always moving indicator upward to desired setting. Example: to change setting from 2 to 3, move the indicator to 4, then back up to 3. To change from 3 to 2, simply move the indicator directly up to 2.

Crimp Diameter

The crimp diameter must be within the tolerance specified below. If not, check calibration of crimper (see Operator's Manual). If calibration is correct, a slight adjustment of the gauge setting may be necessary. To obtain a smaller crimp diameter, move indicator upward to a smaller number. Changing setting by one whole number will change crimp diameter by 0.30". Record any gauge setting adjustment in the "Actual Crimper Setting" column in the chart below.



IMPORTANT

To assure a quality assembly, check the FIRST assembly of each run.
Measure the crimped O.D. and compare it to the figure listed in the "Crimp Diameter" column.
If ACTUAL crimped dimensions are within specification, you have made a good assembly.

Hose		Fitting Type	Crimp Diameter (±.010")	Ferrule Position	Die Fingers	Approx. Guage Setting	Actual Crimper Setting
Type	I.D. (In.)						
6AC134a	5/16	6ACA	.690	Centered	6AC	2	
8AC134a	13/32	8ACA	.780	Centered	8AC	2-3/4	
10AC134a	1/2	10ACA	.890	Centered	10AC	2	
12AC134a	5/8	12ACA	1.020	Centered	12AC	2-1/4	

Industrial Hose Crimp Data

OmniCrimp® 21, PC 3000B, PC 2001 Crimpers

Size (In.)	Description	Work. Press. (psi)	Dash Size	Type	Description	Auto. Part No.	Length +/- .03 (In.)	Dia. (In.)	Hose Insertion Length +/- .03 (In.)	Length +/- .03 (In.)	Crimp O.D. +/- .010 (In.)	Die Set	3000B Approx. Setting ¹	Omni 21 Approx. Setting ¹	User's Actual Setting ¹
5/16	Premo Flex®	315	5 PC	6PC2F-2	80418	-	-	-	-	Full	0.755	21	4 1/2	1.396	
3/8	Premo Flex®	250	6 PC	6PC2F-2	80418	-	-	-	-	Full	0.755	31	5 1/4	1.319	
3/8	Premo Flex®	315	6 PC	6PC2F-2	80418	-	-	-	-	Full	0.815	32	1 1/4	1.430	
3/8	Premo Flex®	250	6 PC	6PC2F-2	80418	-	-	-	-	Full	0.755	21	4 1/2	1.396	
3/8	Premo Flex®	315	6 PC	6PC2F-2	80418	-	-	-	-	Full	0.815	22	1 1/4	1.430	
1/2	Premo Flex®	250	8 PC	8PC1FA	80435	-	-	-	-	Full	0.980	33	1 1/4	1.445	
1/2	Premo Flex®	315	8 PC	8PC1FA	80435	-	-	-	-	Full	0.995	33	1 1/2	1.435	
5/8	Premo Flex®	250	10 PC	12PC2F-2	80423	-	-	-	-	Full	1.145	34	1 1/2	1.467	
5/8	Premo Flex®	315	10 PC	10PC1FA	80436	-	-	-	-	Full	1.120	34	1/2	1.467	
3/4	Premo Flex®	250	12 PC	12PC2F-4	80422	-	-	-	-	Full	1.350	35	2	1.410	
3/4	Premo Flex®	315	12 PC	12PC2F-4	80422	-	-	-	-	Full	1.345	35	1 3/4	1.415	
1	Premo Flex®	250	16 PC	16PC2F-4	80425	-	-	-	-	Full	1.675	37	1/4	1.490	
1-1/4	Premo Flex®	250	20 PC	20PC2F-4	80426	-	-	-	-	Full	1.990	38	3 1/4	1.355	
1/4	Terminator®	501	4 PC	4PC2F-2	80416	-	-	-	-	Full	0.680	31	2 3/4	1.395	
1/4	Terminator®	501	4 G	MegaCrimp®	-	-	-	0.94	-	Full	0.740	31	5 1/2	1.300	
1/4	Terminator®	501	4 PC	4PC2F-2	80416	-	-	-	-	Full	0.680	21	3/4	1.462	
1/4	Terminator®	501	4 G	MegaCrimp®	-	-	-	0.94	-	Full	0.740	21	3 3/4	1.410	
3/8	Terminator®	501	6 PC	6PC2F-4	80462	-	-	-	-	Full	0.870	32	2 3/4	1.410	
3/8	Terminator®	501	6 G	MegaCrimp®	-	-	-	0.94	-	Full	0.920	32	5 1/4	1.300	
3/8	Terminator®	501	6 PC	6PC2F-4	80462	-	-	-	-	Full	0.870	22	2 3/4	1.410	
3/8	Terminator®	501	6 G	MegaCrimp®	-	-	-	0.94	-	Full	0.920	22	5 1/4	1.300	
1/2	Terminator®	501	8 PC	8PC2F-4	80463	-	-	-	-	Full	1.060	33	3 3/4	1.367	
1/2	Terminator®	501	8 G	MegaCrimp®	-	-	-	1.25	-	Full	1.050	33	3 1/2	1.377	
3/4	Terminator®	501	12 PC	12PC2F-4	80422	-	-	-	-	Full	1.360	35	5 1/4	1.300	
3/4	Terminator®	501	12 G	MegaCrimp®	-	-	-	-	-	Full	1.430	35	2 1/2	1.410	
1	Terminator®	501	16 PC	16PC2F-4	80425	-	-	-	-	Full	1.660	36	5 1/4	1.300	
1	Terminator®	501	16 G	MegaCrimp®	-	-	-	1.75	-	Full	1.785	37	3 1/2	1.365	
1-1/4	Terminator®	501	20 PC	20PC2F-2	80427	-	-	-	-	Full	1.970	38	3 1/4	1.380	
1-1/4	Terminator®	501	20 G	MegaCrimp®	-	-	-	1.75	-	Full	2.080	38	6 3/4	1.265	
1-1/2	Terminator®	501	24 PC	24PC2F-4	80428	-	-	-	-	Full	2.260	39	7 1/4	1.260	
2	Terminator®	501	32 PC	32PC2F-4	80429	-	-	-	-	Full	2.910	313	3 1/4	1.390	
3/8	Thermo AG® 570	570	6 PC	6PC2F-2	80418	-	-	-	-	Full	0.750	31	6 1/4	1.324	
3/8	Thermo AG® 570	570	6 PC	6PC2F-2	80418	-	-	-	-	Full	0.750	21	5	1.434	
1/2	Thermo AG® 570	570	8 PC	8PC2F-2	80463	-	-	-	-	Full	0.960	33	2	1.463	
3/8	Thermo AG® 800	800	6 PC	6PC2F-2	80418	-	-	-	-	Full	0.780	32	1	1.465	
3/8	Thermo AG® 800	800	6 PC	6PC2F-2	80418	-	-	-	-	Full	0.780	22	1	1.465	
1/2	Thermo AG® 800	800	8 PC	8PC2F-2	80463	-	-	-	-	Full	0.960	33	2	1.463	