

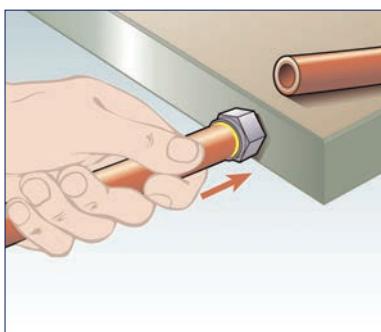
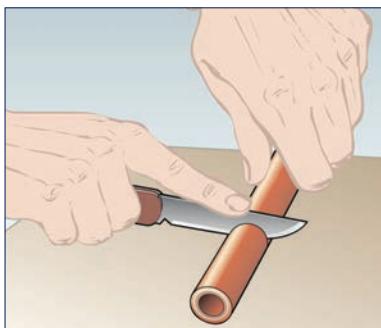
# Hydraulic Hoses and Fittings

Low Pressure



ENGINEERING YOUR SUCCESS.

# Easy assembly – no tools or clamps required



## Assembly Instructions

1. Cut the hose right angled with a sharp knife. If necessary it is possible to use a lubricant (water/soap solution with 5 % soap fluid and 95 % water) for easy assembly.

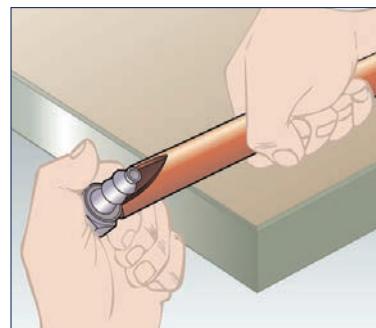
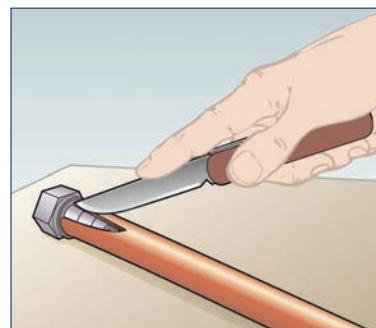
2. Insert fitting into hose until first barb is in hose. Place end of fitting against a flat object (bench, door, wall) and grip hose approximately 1" from end and push with a steady force until end of hose is covered by yellow plastic collar. Alternatively please use the Parker Assembly Tool No 611050G, 611050HV or TH1E-5.

## Attention!

During assembly, please keep in mind that Push-Lok fittings will provide an effective grip only when the Push-Lok hose is pushed fully on the insert, where the cropped end of the hose should be fully concealed by the plastic collar. **For easy assembly of hose 830M, 837BM and 837PU please use only Push-Lok Assembly Oil No. H896137.** Push-Lok Assembly Oil is free from wetting disturbing substances. Don't use oil, lubricant or soap fluids for this hose!

## Disassembly Instructions

1. Cut lengthwise along a line at approximately a 20° angle from centre line of hose. The cut should be approximately 1" long.  
Be careful not to nick barbs when cutting the hose.



2. Grip hose and give a sharp down-ward tug to disengage from fitting.

## Attention!

Before re-use of the nipple please check nipple for damage. Damaged nipples can cause leakage.

# Low Pressure Transportation and Hydraulic Hose and Fittings

- the right solution for special applications and requirements



- A wide range of different hose types in rubber is available, with textile-braided or fire-retardant covers
- Proven, safe and easy self-assembly system
- Large bore sizes available
- High working temperatures
- One fitting series for all SAE 100 R5 and similar hoses

## Applications

The definitive hose range for all special applications and requirements



# Parkrimp® *No-Skive*

The system for fast and leak-free assemblies

## The perfect match



The complete system from one source. No-Skive hose, No-Skive fitting and crimping machine with world-wide guarantee and availability.

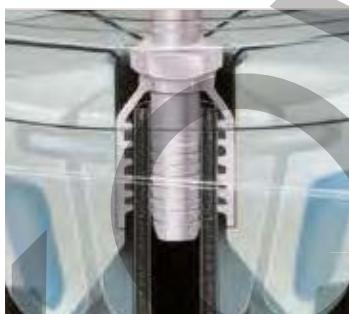
## Parker's colour-coded die sets



No loose parts to mismatch or misplace – die set segments linked together.

Die sets provide 360° evenly applied crimping forces for an ideal crimp result.

## Parkalign®



Parker's exclusive Parkalign® positions the fitting in the dies perfectly every time.



KarryKrimp® 1



Parkrimp®

KarryKrimp® 2  
Bench Mount



## Parkrimp® *No-Skive*

- No skiving tool needed
- No need to remove the cover
- Crimps one-piece fittings
- Parkalign positions the fittings in the dies perfectly every time
- Quick and easy: no gauges to set on the machine
- Portable machines for field repair
- Meets EN safety regulations



## Low Pressure Transportation and Hydraulic

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<b>213</b>	Transportation	B2a-3
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<b>285</b>	Refrigeration	B2a-5
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Parker Hannifin assumes no liability for typographical errors or other errors

## High temperature



## Railway



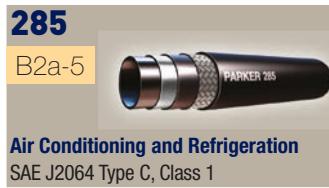
## Transportation



## Fire retardant



## Refrigeration



**201****No-Skive Airbrake**

SAE 100R5 - SAE J1402AII

**Primary Applications**

Transportation: Air brake hose

General: Low pressure applications

**Type Approvals**Details please find on pages **Ab-16** to **Ab-19****Applicable Specifications**

SAE 100R5, SAE J1402AII, D. O. T. FMVSS 106-AII

**Construction**

Inner tube: Synthetic rubber

Reinforcement: One fibre braid

One high-tensile steel wire braid

Cover: Rubber layer and textile braided cover

Temperature Range ..... -40 °C up to +150 °C

Exception: Air ..... max. +70 °C

Water ..... max. +85 °C



- Textile braided cover
- **No-Skive** hose construction
- 150 °C working temperature

**Recommended Fluids**

Petroleum based hydraulic fluids, water-glycol and water-oil emulsion hydraulic fluids, grease, lubricants, crude and fuel oils, air and water.

Consult the chemical compatibility section on pages **Ab-26** to **Ab-34** for more detailed information.

**Fitting Series**

Part Number	Hose I.D.			Hose O.D.			Pressure Rating				Vacuum*	min. bend radius	weight
	Inch	Size	mm	mm	mm	MPa	psi	MPa	psi	kPa	mm		
201-4	3/16	-4	5.0	12.2	20.7	3000	83.0	12000	95	75	0.22		
201-5	1/4	-5	6.3	14.8	20.7	3000	83.0	12000	95	85	0.27		
201-6	5/16	-6	8.0	17.2	15.5	2250	62.0	9000	95	100	0.34		
201-8	13/32	-8	10.0	19.5	13.8	2000	55.0	8000	95	120	0.40		
201-10	1/2	-10	12.5	23.4	12.0	1750	48.0	7000	95	140	0.55		
201-12	5/8	-12	16.0	27.4	10.3	1500	41.0	6000	95	165	0.68		
201-16	7/8	-16	22.0	31.4	5.5	800	22.0	3200	67	185	0.68		
201-20	1 1/8	-20	29.0	38.1	4.3	625	17.0	2500	67	230	0.76		
201-24	1 3/8	-24	35.0	44.5	3.5	500	14.0	2000	51	265	1.01		
201-32	1 13/16	-32	46.0	56.4	2.4	350	10.0	1400	37	335	1.32		

\*1 = the vacuum values listed in the table are vacuum pressure values in kPa. For an absolute value subtract the table value from 101kPa.

The combination of high temperature and high pressure could reduce the hose life.

The maximum working pressures shown in the table are for service up to a maximum temperature of 100 °C.

For use at higher temperatures, consult the pressure/temperature curve in section A for the reduced maximum working pressure.

**Hose layline example**

**Parker** 201-6 AIR BRAKE DOT XXXXX AII 8 mm (5/16) SAE J1402 DOT XXXXX AII WP 15,7 MPa (2250 PSI) DOT XXXXX AII SAE 100R5-6 8/78 DOT XXXXX AII MADE IN XXXX

**206****No-skive Airbrake**

SAE 100R5 - SAE J1402AII

**Primary Applications**

Transportation: Air brake hose

General: Low pressure applications

**Type Approvals**Details please find on pages **Ab-16** to **Ab-19****Applicable Specifications**

SAE 100R5, SAE J1402AII, D. O. T. FMVSS 106-AII

**Construction**

Inner tube: PKR synthetic rubber

Reinforcement: One fibre braid

One high-tensile steel wire braid

Cover: Rubber layer and  
blue textile braided cover

Temperature Range ..... -48 °C up to +150 °C

Exception: Air ..... max. +100 °C

Water ..... max. +85 °C

- Blue textile braided cover
- **No-skive** hose construction
- For very low (-48 °C) working temperature

**Recommended Fluids**

Petroleum based hydraulic fluids, water-glycol and water-oil emulsion hydraulic fluids, grease, lubricants, crude and fuel oils, air and water.

Consult the chemical compatibility section on pages **Ab-26** to **Ab-34** for more detailed information.**Fitting Series**

Part Number	Hose I.D.		Hose O.D.		Pressure Rating				Vacuum*	min. bend radius	weight
	Inch	Size	mm	mm	max. working pressure	min. burst pressure	psi	kPa			
206-4	3/16	-4	5.0	13.2	20.7	3000	83.0	12000	95	75	0.22
206-5	1/4	-5	6.3	14.8	20.7	3000	83.0	12000	95	85	0.27
206-6	5/16	-6	8.0	17.1	15.5	2250	62.0	9000	95	90	0.34
206-8	13/32	-8	10.0	19.5	13.8	2000	55.0	8000	95	90	0.40
206-10	1/2	-10	12.5	23.4	12.0	1750	48.0	7000	95	100	0.55
206-12	5/8	-12	16.0	27.4	10.3	1500	41.0	6000	95	100	0.68
206-16	7/8	-16	22.0	31.4	5.5	800	22.0	3200	67	100	0.68
206-20	1 1/8	-20	29.0	38.1	4.3	625	17.0	2500	67	140	0.76
206-24	1 3/8	-24	35.0	44.5	3.5	500	14.0	2000	51	190	1.01
206-32	1 13/16	-32	46.0	56.4	2.4	350	10.0	1400	37	335	1.32

\*1 = the vacuum values listed in the table are vacuum pressure values in kPa. For an absolute value subtract the table value from 101kPa.

The combination of high temperature and high pressure could reduce the hose life.

The maximum working pressures shown in the table are for service up to a maximum temperature of 100 °C.

For use at higher temperatures, consult the pressure/temperature curve in section A for the reduced maximum working pressure.

**Hose layline example**

Parker 206-16 WP 5,6 MPa [800 PSI] SAE 100R5-16 22 mm [7/8] 4Q81 MADE IN XXXX

Parker 206-16 WP 5,6



**213****No-skive High Temperature**

For engines and compressed air systems

**Primary Applications**

Transportation: Air brake hose

Compressors: Compressed air hose

**Type Approvals**Details please find on pages **Ab-16** to **Ab-19****Applicable Specifications**

SAE J1402AI, D.O.T. FMVSS 106-AI

**Construction**

Inner tube: PKR synthetic rubber

Reinforcement: One fibre braid

One high-tensile steel wire braid

Cover: Rubber layer and  
black textile braided cover  
include 2 green strips

- **No-skive** hose construction
- Ideal for high-temperature and small bend radii applications
- Compatible with a large range of fluids

**Recommended Fluids**

Petroleum based hydraulic fluids, water-glycol and water-oil emulsion hydraulic fluids, grease, lubricants, crude and fuel oils, air and water.

Consult the chemical compatibility section on pages **Ab-26** to **Ab-34** for more detailed information.

Temperature Range ..... -45 °C up to +150 °C

Exception: Air ..... max. +100 °C

Water ..... max. +85 °C

**Fitting Series**

Part Number	Hose I.D.			Hose O.D.			Pressure rating		min. bend radius	weight
	Inch	Size	mm	mm	MPa	psi	MPa	psi		
213-4	3/16	-4	5.0	12.5	14.0	2000	55.0	8000	20	0.18
213-5	1/4	-5	6.3	14.0	10.5	1500	41.0	6000	25	0.21
213-6	5/16	-6	8.0	16.0	10.5	1500	41.0	6000	30	0.25
213-8	13/32	-8	10.0	19.0	8.7	1250	34.0	5000	45	0.30
213-10	1/2	-10	12.5	21.0	7.0	1000	28.0	4000	55	0.33
213-12	5/8	-12	16.0	24.0	5.2	750	21.0	3000	70	0.36
213-16	7/8	-16	22.0	31.0	2.8	400	11.0	1600	90	0.45
213-20	1 1/8	-20	29.0	38.0	2.1	300	8.0	1200	115	0.65
213-24	1 3/8	-24	35.0	44.0	2.1	300	8.0	1200	190	0.77
213-32	1 13/16	-32	46.0	54.0	1.4	200	5.5	800	355	1.00

The combination of high temperature and high pressure could reduce the hose life.

The maximum working pressures shown in the table are for service up to a maximum temperature of 100 °C.

For use at higher temperatures, consult the pressure/temperature curve in section A for the reduced maximum working pressure.

**Hose layline example**

PARKER 213-16 WP 2,8 MPa (400 PSI) 22 mm (7/8) 3Q88

PARKER 213-16 WP 2,8

**221FR****No-skive Fire Retardant**

Marine fuel and engine hose

**Primary Applications**

Marine: Marine fuel hose

General: Where fire retardance is an issue

**Type Approvals**Details please find on pages **Ab-16** to **Ab-19****Applicable Specifications**

SAE J1527 R3, USCG Type A1, SAE J1942, ISO 7840

**Construction**

Inner tube: Fuel and oil-resistant rubber

Reinforcement: One high-tensile steel wire braid

Cover: Flame retardant special fibre outer cover

Temperature Range ..... -20 °C up to +100 °C

Exception: Air ..... max. +70 °C

Water ..... max. +85 °C

- Fire retardant hose cover
- **No-skive** hose construction
- Marine approvals

**Recommended Fluids**

Petroleum based hydraulic fluids, water-glycol and water-oil emulsion hydraulic fluids, grease, lubricants, crude, fuel oils and water.

Consult the chemical compatibility section on pages **Ab-26** to **Ab-34** for more detailed information.

**Fitting Series**

Part Number	Hose I.D.		Hose O.D.		Pressure Rating				Vacuum*	min. bend radius	weight
	Inch	Size	mm	mm	max. working pressure	min. burst pressure	psi	MPa			
221FR-5	1/4	-5	6.3	15	3.5	500	14.0	2000	81	25	0.28
221FR-6	5/16	-6	8.0	17	3.5	500	14.0	2000	81	30	0.34
221FR-8	13/32	-8	10.0	20	3.5	500	14.0	2000	81	45	0.42
221FR-10	1/2	-10	12.5	23	3.5	500	14.0	2000	68	55	0.58
221FR-12	5/8	-12	16.0	27	3.5	500	14.0	2000	68	70	0.61
221FR-16	7/8	-16	22.0	31	3.5	500	14.0	2000	68	90	0.70

\* The vacuum values listed in the table are vacuum pressure values in kPa. For an absolute value subtract the table value from 101kPa.

The combination of high temperature and high pressure could reduce the hose life.

Hose layline example

PARKER 221FR-10 SAE J1527 USCG TYPE A1 CE 1085 ISO 7840-A1 WITH 26 SERIES CRIMP FITTINGS ONLY

**285****Air Conditioning and Refrigeration**

SAE J2064 Type C, Class 1

**Primary Applications**

Air Conditioning: For industrial and mobile applications

**Applicable Specifications**

SAE J2064 Type C, Class 1

**Construction**

Inner tube: Nylon barrier between two elastomeric layers

Reinforcement: One textile braid

Cover: Heat, moisture and ozone resistant rubber

Temperature Range ..... -30 °C up to +125 °C

**Recommended Fluids**

For use with Freon refrigerants 12, 134a and 22.

Consult the chemical compatibility section on pages **Ab-26** to **Ab-34** for more detailed information.**Fitting Series**

Part Number	Hose I.D.		Hose O.D.		Pressure Rating		Vacuum*	min. bend radius	weight
	Inch	Size	mm	mm	max. working pressure	min. burst pressure			
285-4-RL	3/16	-4	5.0	12.4	3.4	500	17.2	2500	95
285-6-RL	5/16	-6	8.0	15.7	3.4	500	17.2	2500	95
285-8-RL	13/32	-8	10.0	18.8	3.4	500	17.2	2500	95
285-10-RL	1/2	-10	12.5	21.1	3.4	500	17.2	2500	95
285-12-RL	5/8	-12	16.0	24.4	3.4	500	17.2	2500	95

\*1 = the vacuum values listed in the table are vacuum pressure values in kPa. For an absolute value subtract the table value from 101kPa.

For size -16 a hose 285-16 is available on request.

RL = only available on reels.

Hose layline example

PARKER 285-10 WP 3,4 MPa [500 PSI] SAE J2064 TYPE C CLASS I 12,5 mm (1/2) 10-4Q09

**293****No-skive High Temperature**

Engine and air brake/truck hose

**Primary Applications**

Truck Market: Air brake hose  
Engine cooling circuit

**Type Approvals**Details please find on pages **Ab-16** to **Ab-19****Applicable Specifications**

SAE J1402AI, D.O.T. FMVSS 106

**Construction**

Inner tube: PKR synthetic rubber

Reinforcement: One fibre braid

Cover: Black nylon braid

Temperature Range ..... -50 °C up to +150 °C

Exception: Air ..... max. +100 °C  
Water ..... max. +85 °C

- High temperature
  - high flex hose performance
- **No-skive** hose construction
- Wide temperature range

**Recommended Fluids**

Petroleum-based hydraulic fluids and lubrication oils, diesel fuels and antifreeze solutions; water-, water-oil- and water-glycol emulsion hydraulic fluids.

Consult the chemical compatibility section on pages **Ab-26** to **Ab-34** for more detailed information.

**Fitting Series**

Part Number	Hose I.D.		Hose O.D.		Pressure rating				min. bend radius	weight
	Inch	Size	mm	mm	max. working pressure	MPa	psi	min. burst pressure	MPa	kg
293-4-RL	3/16	-4	5.0	12.5	3.5	500	13.8	2000	15	0.15
293-6-RL	5/16	-6	8.0	15.7	3.5	500	13.8	2000	25	0.22
293-8-RL	13/32	-8	10.0	18.7	3.5	500	13.8	2000	40	0.27
293-10-RL	1/2	-10	12.5	21.1	3.1	450	12.4	1800	50	0.30
293-12-RL	5/8	-12	16.0	24.3	3.1	450	12.4	1800	65	0.33
293-16-RL	7/8	-16	22.0	30.6	3.1	450	12.4	1800	80	0.37

The combination of high temperature and high pressure could reduce the hose life.

RL = only available on reels.

**Hose layline example**

PARKER 293-6 AIR BRAKE 8 mm (5/16) SAE J1402 W.P. 3,5 MPa (500 PSI) ————— PARKER 293-6

**611HT****No-skive**

High-temperature textile hose

**Primary Applications**

General Market: Low pressure hydraulic applications/  
high temperature applications

Engine Applications:  
Diesel fuel lines, engine cooling circuits

**Type Approvals**Details please find on pages **Ab-16** to **Ab-19****Applicable Specifications**

EN 854-R6

**Construction**

Inner tube: PKR synthetic rubber

Reinforcement: One fibre braid

Cover: MSHA approved synthetic rubber

Temperature Range ..... -40 °C up to +150 °C

Exception: Air ..... max. +100 °C  
Water ..... max. +85 °C

- For high demand applications, such as diesel fuel lines, water cooling or high-temp lines up to +150 °C
- MSHA approved
- According to EN 854-R6
- **No-skive** hose construction for 2-piece fittings

**Recommended Fluids**

Petroleum-based hydraulic fluids and lubrication oils, diesel fuels and antifreeze solutions; water-glycol and water-oil emulsion, air and water.

Consult the chemical compatibility section on pages **Ab-26** to **Ab-34** for more detailed information.

**Fitting Series**

Part Number	Hose I.D.				Pressure Rating				min. bend radius	weight	
	DN	Inch	Size	mm	Hose O.D. mm	max. working pressure MPa	psi	min. burst pressure MPa	psi		
611HT-4	6	1/4	-4	6.4	12.8	2.8	400	11.2	1600	65	0.13
611HT-6	10	3/8	-6	9.5	16.0	2.8	400	11.2	1600	75	0.16
611HT-8	12	1/2	-8	12.7	20.0	2.8	400	11.2	1600	100	0.27
611HT-10	16	5/8	-10	15.9	23.2	2.4	350	9.6	1400	125	0.28
611HT-12	19	3/4	-12	19.1	26.2	2.1	300	8.4	1200	150	0.36

The combination of high temperature and high pressure could reduce the hose life.

\* see Thermoplastic catalogue 4460

Hose layline example

PARKER 611HT-4 HI-TEMP WP 2,8 MPa (400 PSI) MSHA IC-40/10 | • • SAE 100R6-4 6,3 mm (1/4) X 1F EN854/R6/6

**681DB****No-skive 2TE**

EN 854-2TE

(with approvals for rail transportation)

**Primary Applications**

General Market: Low pressure hydraulic application

Rail Transportation Market:

Hydraulic applications around  
train vehicles**Type Approvals**Details please find on pages **Ab-16** to **Ab-19****Applicable Specifications**

EN 854-2TE

**Construction**

Inner tube: Synthetic rubber

Reinforcement: One fibre braid

Cover: Flame retardant synthetic rubber

Temperature Range ..... -40 °C up to +100 °C

Exception: Air ..... max. +70 °C  
Water ..... max. +85 °C**Recommended Fluids**

Petroleum based hydraulic fluids, water-glycol and water-oil emulsion hydraulic fluids, grease, lubricants, crude and fuel oils, air and water.

Consult the chemical compatibility section on pages **Ab-26** to **Ab-34** for more detailed information.**Fitting Series**

Part Number	Hose I.D.				Hose O.D. mm	Pressure Rating				min. bend radius mm	weight kg
	DN	Inch	Size	mm		max. working pressure MPa	psi	min. burst pressure MPa	psi		
681DB-4	6	1/4	-4	6.4	13.6	7.5	1090	30.0	4360	40	0.15
681DB-5	8	5/16	-5	7.9	14.8	6.8	980	27.0	3920	50	0.16
681DB-6	10	3/8	-6	9.5	16.6	6.3	910	25.0	3640	60	0.19
681DB-8	12	1/2	-8	12.7	19.6	5.8	840	23.0	3360	70	0.24
681DB-10	16	5/8	-10	15.9	23.9	5.0	725	20.0	2900	90	0.35
681DB-12	19	3/4	-12	19.1	27.0	4.5	650	18.0	2600	110	0.39
681DB-16	25	1	-16	25.4	34.4	4.0	580	16.0	2320	150	0.59

The combination of high temperature and high pressure could reduce the hose life.

\* see Thermoplastic catalogue 4460

**Hose layline example**

PARKER 681DB-6 WP 6,3 MPa (910 PSI) F 10 mm (3/8) EN854/2TE/10/DIN MADE IN ITALY

