



### Minilight Wheels



1. Deep dish, polished rim with CN5 type nuts & center caps.
- a. 6x13" ..... C-21A1981
  - b. 7x13" ..... C-21A1982
  - c. Center cap ..... C-21A1983

### Classic Wheels



2. Steel wheels 4.5 x 10".
- a. Silver finish. Sold individually ..... 21A1286
  - b. Old English White finish. Sold individually ..... 21A1286WHITE
  - c. Cap to fit above wheels. Sold individually ..... 21A1287

3. Dunlop 5x10" look alike wheel. .... WHL1004



4. Rose petal wheel. 4.75x10" ..... C-21A1071

### Radiator Hoses

Radiator hoses break down into 3 main types. 1959 - 1989, those with the cast metal heater valve bolted to the cylinder head. The redesigned bottom hose for these will fit everything and is made in KEVLAR or silicon only, for longevity as they are awkward to replace.

1989-1996 with a plastic hose fitted in heater hose line. 1996 on cars with twin point injection with front mounted radiator had totally different hoses.

\* These hoses come in small or large bore size but with different lengths so if you are not sure then buy the longer one & cut to length needed.

#### Kevlar

- Long lasting
  - Hi strength
  - Low Heat transfer
  - Wear Resistant
- A high tech aramid fiber produced by DuPont. Kevlar fibers are evenly dispersed & bonded to the rubber, giving considerable strength.

#### Silicon

The next step up from Kevlar is the blue silicon type which not only brightens up the engine bay, but also withstands higher temperature and pressure.

			Rubber	Kevlar	Silicon
1959 - 1989	TOP HOSES	Small Bore	Original MK1 Mini Radiator plus all 998 / 1098 clubman. 6 1/2" long	GRH467	a C-GRH467 Order this part in kit C-GRH003
			850/998 from 1967 or any new type radiator 5" long	GRH245	b C-GRH245 Order this part in kit C-GRH001
	TOP HOSES	Large Bore	Copper 'S' and 1275cc Mini	GRH247	c C-GRH247 Order this part in kit C-GRH002
			1275GT Clubman 1/2" longer than 'S'		GRH469KEVLAR C-GRH469 Order this part in kit C-GRH004
	BOTTOM HOSE		With heater outlet		GRH240KEVLAR d C-GRH240
			Without heater outlet	f GRH802	
HEATER HOSE		1/2" Heater hose. (sold per metre except silicon)	GRH1006	GRH1006KEVLAR	e 1m = C-GRH1006 1.2m = C-GRH1007
1989 on	TOP HOSES		Cooper with HIF44 1 3/4 carb. 1 1/4 bore hose one end. 1990-92	g GRH1140	C-GRH1140
			Mini HIF38 1 1/2 carb 1991-1994 Plus all single point injections	h GRH1212	C-GRH1212
			Twin point with front mounted radiator. 1966 on	i GRH1465	C-GRH1465
	BOTTOM HOSES		Mini HIF44 1 3/4 carb	j GRH1159	C-GRH1159
			Mini HIF38 1 1/2 carb 1991-1994	k GRH1289	
			Single point injection	l GRH1242	C-GRH1242
			Twin point injection. Fits 1996 only	m GRH1466	
	HEATER HOSE		5/8" Heater Hose Sold per metre	GRH905	

### Hose Kits

5. Silicon hose kits include:
- 1 x C-GRH240 (d)
  - 1x C-GRH1006 (e - 39")
  - 1x C-GRH1007 (e - 42")
- but have different top hoses:
- Includes Top Hose .. Order kit as
- C-GRH245 (b) ..... C-GRH001
  - C-GRH247 (c) ..... C-GRH002
  - C-GRH467 (a) ..... C-GRH003
  - C-GRH469 ..... C-GRH004

### Heater Hose Grommet

6. The rubber Grommet that sits in the body as a sleeve to protect the heater hoses from chaffing.
- a. For 1"(25mm) hole pre 1989 ..... 34G3651
  - b. For 1 5/16"(33.5mm) hole. 2" wide. 1990 on ..... CLP6235



### Radiator Caps

7. a. 7lb long neck 33.6mm tall, early 850cc. .... GRC101
- b. 7lb short neck 27.5mm tall, 850/998. 1965-69 .... GRC102
- c. 13lb short neck 27.5mm tall, 1970-80 ..... GRC1111
- d. 15lb except rads with sender unit, 1980-92 ..... GRC1110
- e. 15lb as above, has built in seal, 1992-96 ..... GRC207
- f. Non pressurised cap for some expansion tanks. .... GRC126
8. Plastic expansion tank cap twin point cars ..... GRC1184



## 15 Radiators, Fans and Thermostats



### Radiators & Fans

In 1978 we introduced a 4 core radiator with 25% increased water capacity which greatly increased cooling efficiency. To cope with hotter running engines a 2 core radiator unique to Mini Spares with original shape header tanks was developed, it has 2 very large cores with V shaped gills which is lighter, narrower and with increased air flow out performed the 4 core. All 2 cores have a switch hole fitted with a drain plug which can be replaced by a screw in sender unit if required. Beware of competitors copies, when tested professionally, they are not the same. The 2 core radiator being lighter material can be prone to fin blockage/damage by a heavy deluge of mud or muck and is not ideal for Grasstrack or Autocross.



1. a. Super cool 2 core radiator with drain plug ..... C-ARA4442  
b. As above with heavy duty screw in sensor ..... C-ARA4443
2. a. 4 core radiator ..... C-ARA4444  
b. 4 core radiator with drain plug ..... C-ARA4444B  
c. 4 core radiator with fan sensor unit ..... C-ARA4446
3. 3 core original S radiator 90on, push in sender type ..... GRD172
4. 3 core standard replacement radiator ..... ARP2000
5. Aluminium 2 core radiator for extra hot climates.  
a. Fits pre 1990 Minis ..... C-ARA4441  
b. Fits Minis 1990 on ..... C-ARA4441A
6. Aluminium 2 core radiator with universal plug hole for electric fan switch, comes with plug when switch not used ..... C-ARA5000
7. Replacement screw in sender for C-ARA4443 ..... C-ARA4445
8. a. Push in sender unit for GRD172 original Rover fitting ..... GVS104  
b. Seal for GVS104 available separately. .... CDU2334  
c. Clip for CDU3374 seal and sender unit ..... KTP9002
9. Front mounted radiator as used on MPI injection Minis, now supplied with metal header tanks ..... GRD974
10. Mini Spares top finisher for original MPI plastic type radiator. Does not fit current metal type ..... 8B12600
11. a. Original Expansion tank for MPI in plastic ..... PCF101240  
b. In alloy for durability and engine bay cosmetics/looks ..... PCF101240ALLOY



### Radiators Brackets

12. a. 'S' top radiator bracket. Required when fitting 1300cc based engines in the Mini, (not Clubman). Available in stainless steel for better engine bay presentation ..... 12G617S  
b. Original in black, as per Cooper 'S' ..... 12G617  
c. 1275GT top radiator bracket ..... 12G2453
13. a. Top radiator bracket for 1990-96 Minis in stainless steel ..... PCUI0135S  
b. Top radiator bracket for 1990-96 Minis in black ..... PCUI0135
14. Radiator bracket seal. Fits all uppers plus lower pre 1974 ..... 11G227
15. Radiator bracket seal. Lower only 1974 on (one piece cowling) ..... CAM4618POLY
16. Original top shoulder bolt. Upto 1974 (two piece cowling) ..... 11G228



### Radiator Fans

17. Two blade fan can be used as shown by crossing two blades to make a four blade fan. Produces better air flow, but noisy. Order each blade individually ..... 2A997
18. Six blade metal fan as used on export vehicles ..... 2A998
19. Eleven blade plastic yellow fan as used on home market Minis ..... 12G2129
20. a. Complete electric fan kit for Mini or Clubman made by the original Kenlowe company. .... C-ARA4400  
b. Replacement temperature sender for Kenlowe only. .... KLM1416
21. Sender unit sleeve that fits into a cut top hose with adjustable temp dial, not advisable for Cooper S top hose GRH247 owing to hose size and shape. .... KLM1417



22. Full electric fan kit includes fan, brackets, professional variable adjustable fan temperature switch (70-120c), sender unit & hose clips ..... C-ARA4401

23. a. Replacement for the old Rover 5 blade electric fan PGG10058 which is now obsolete. Mini Spares new 10 blade plastic fan has been adapted to fit any 1991-1995 mini that has the large round hole in the inner wing as standard using existing fitting points and wiring. .... PGG10058MS  
b. The same electric fan but for universal fitment ..... KLM1418  
c. Twin point original front mounted radiator fan ..... PGG100890



Original Fan - Now Obsolete PGG10058

New Replacement Fan - PGG10058MS

### Thermostats & Blanking Sleeves

- Removal of the thermostat helps reduce engine temperature where cooling is a problem, but a thermostat blanking sleeve must be fitted to retain correct water circulation around the entire head. Failure to do so will cause overheating around 3 and 4 combustion chambers - with obviously disastrous results. If the blanking sleeve is used, it is necessary to blank off the by pass hose between head and water pump. Large impeller water pump GWP187 has the by-pass outlet drilling omitted from alloy casting. The higher the temperature the more thermally efficient the engine becomes, the 88° was fitted as standard from 1990 on. It is possible to run thermostats with the troublesome by-pass hose blanked off - 4 or 6 1/8" holes should be drilled around the periphery of the thermostat. The gaskets are GTG101MS.
24. Thermostat blanking sleeve ..... 11G176
  25. a. 74°C thermostat (165°F) ..... GTS102  
b. 82°C thermostat (180°F) ..... GTS104  
c. 88°C thermostat (192°F) ..... GTS106





### Thermostats Housings

- The most commonly fitted thermostat housing (water elbow) up to 1990 before introduction of sandwich plates. Also fits most single point injection cars, without ancillary holes. . . . . **12G103**
  - Thermostat fitting kit. . . . . **12G103FK**
- Thermostat & sandwich plate gasket . . . **GTG101MS**
- Same 12G103 casting shape but with a 8mm hole drilled for sensor unit on carb models 1990 on. . . . . **PEQ10010**
- Large bore (1.25" 32mm) elbow.
  - For small outlet pipe is not drilled as fitted to Mini from 1990 on carb models. . . . . **PEQ10019**
  - For small outlet is drilled as overflow pipe for expansion tank as used on Mini Metros. . . **CAM6117**
- Some late single point and autos. . . . **PEQ100690**
- Twin point front mount radiators only **PEQ100650**
- Thermostats must be fitted in the sandwich plates when used and there were 3 different types fitted from 1990, plus one for the Metros which also fitted the ERA Turbo.
  - Metro and ERA Turbo where the outlet points straight at radiator and has 14-15mm bore outlet . . . . . **12G3512**
  - Sandwich plate with 10mm bore outlet elbow but no threaded holes . . . . . **PEG10002**
  - As per PEG10002 but with extra 8mm thread hole for YWL10010 sensor . . . . . **PEM10036**
  - As per PEM10036 but with 12mm thread hole (1.5 fine pitch) to take sensor GTR206 for twin point injection only. . . . . **PEG100030**



### Temperature Transmitters

- Temperature transmitters that fit in cylinder head.
  - All Minis 1970 on . . . . . **GTR101**
  - Cooper 'S' from 1964 and all Minis up to 1970 with voltage stabiliser fitted . . . . . **GTR104**
- Single point injection fits in manifold. Cars after 1991. . . . . **GTR307**
- Twin point injection cars, fitted in sandwich plate. . . . . **GTR206**
- Cooper SE sensor, fits in sandwich plate. Fits Cars 1990-91 . . . . . **YWL10010**



### High Capacity Water Pumps

SMALL IMPELLER

LARGE IMPELLER



- Use of high capacity alloy water pumps help to circulate a greater volume of water. Cavitation reduction is achieved by using a large diameter water pump pulley as originally fitted to the 'S' and reintroduced on the A-plus engines, further improving cooling. It is necessary to check clearances in the block as well as between the pump and the cylinder head. Early small bore blocks do not have the water jacket machined around No.1 bore for the deeper impeller, because if a lot of material has been machined from the head face it may foul the pulley. If the 12G940 head is fitted to a small bore engine, it is necessary to modify the top edge of the water pump otherwise the head will sit on this and not seal properly. Look to get at least a 1/16" gap. Superseal gasket is available as GUG705555GM.
- 850cc and early cars where large impeller will not fit . . . **GWP132**
  - High capacity water pump with by-pass hose take off . . . **GWP134**
  - Water pump fitting kit. . . . . **GWP134FK**
  - High capacity water pump - no by pass hose take off. . . . **GWP187**
  - High capacity, one bolt hole less, Twin point only. . . . **GWP188**

### Water Pump By-Pass Hoses

- This longer By-Pass tube enables the hose to be changed without removing the cylinder head. Slide the shortened hose up the tube and then back down on the water pumps . . . . . **12A2075**
- A source of misery to owners of earlier cars, the by-pass hose was eventually discontinued on late A plus engines.
  - Kevlar reinforced hose fits all except 1275cc engines but will need shortening by 8-10mm when used with the longer cylinder head by-pass tube 12A2075 . . . . . **GZA2083**
  - Kevlar reinforced longer hose for cooper 'S' and all 1275cc engines . . . . . **AEG484**
  - Silicon hose for 1275cc, shorten for fitment on other applications . . . . . **C-GZA2083**
- Fluted flexible hose allowing fitment without removing cylinder head. Supplied with clips . . . . . **12A1093MS**
- Original by-pass hose clip . . . . . **3H2963**



### Heater Valves

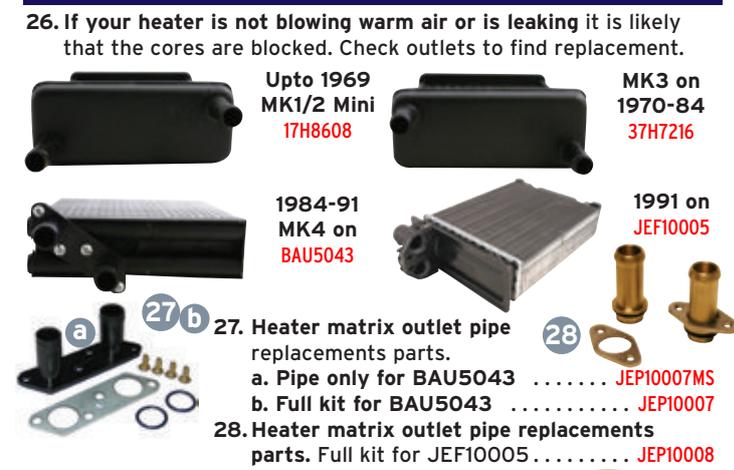
- Heater Valve. Bolts directly onto cylinder head. Pre 1989.
  - Straight (not shown) . . . . . **13H5506**
  - Angled genuine . . . . . **ADU9102**
  - Angled Non genuine. . . . . **ADU9102MS**
  - Gasket . . . . . **88G221**
- Plastic Body In-line Heater Valve. . . . . **JJB10011**
- Plastic Body Heater Valve for twin point cars only. . . . . **JJB100260**
- Heater valve blanking plate for cylinder head when required . . . . . **2A180**
- Heater tap stud. Sold individually . . . . . **53K402**
- Heater tap stud. Stainless steel. Sold individually . . . . . **53K402S**
- Heater tap stud & six sided nut. Stainless steel (2 of each). . . . **C-STR285**
- Heater tap bolt as fitted to later A+ engines in s/steel. (Sold in pair) **C-STR283**



### Heater Radiator Matrix

- If your heater is not blowing warm air or is leaking it is likely that the cores are blocked. Check outlets to find replacement.
 

Upto 1969 MK1/2 Mini <b>17H8608</b>	MK3 on 1970-84 <b>37H7216</b>
1984-91 MK4 on <b>BAU5043</b>	1991 on <b>JEF10005</b>
- Heater matrix outlet pipe replacements parts.
  - Pipe only for BAU5043 . . . . . **JEP10007MS**
  - Full kit for BAU5043 . . . . . **JEP10007**
- Heater matrix outlet pipe replacements parts. Full kit for JEF10005. . . . . **JEP10008**



### Engine Core Plugs

- Core plug 41.4mm wide Cup type for all Cooper 'S' engines only. Sold individually . **AEH592**
- Core plug 33.6mm wide Cup type for all A Plus engines and 1275cc non S engines . . . **AEC876**
- Core plug 41.4mm wide Flat dished type for all early A series Pre A Plus . . . . . **2K8169**

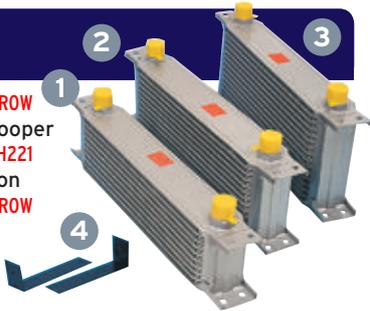


## 17 Oil Coolers, Hoses and Filters



### Oil Coolers

- 10 row oil cooler. . . . . **MOC10ROW**
- 13 row oil cooler as fitted to Cooper 'S'. . . . . **C-ARH221**
- 16 row oil cooler for competition use. . . . . **MOC16ROW**
- Original oil cooler brackets to fit on front subframe. Sold individually . . . . . **21A1794**



(Check clearance on latest cars).

### Oil Cooler Hose Kits

- Mini Clubman / specials usually require longer pipe kits than the standard Mini. Kits include all unions for easy fitment. Rubber is adequate for standard use but Braided is more durable and preferred for Competition Performance use.

If a pre engaged starter is fitted (integral solenoid) the oil cooler has to be mounted closer to the alternator resulting in longer pipes.

A-series engines up to 1992 had a block union size of 5/8" UNF and filter head union size of 1/4" NPT. From 1992 on, union sizes changed on all engines with a 12A prefix number and became universal at 11/16" UNF. The filter head for these is recognisable by casting part number LPX10027.

See chart below for part numbers



Braided Kit Code	Rubber Kit Code	Fits Mini	Block To Cooler	Filter Head Pipe To Cooler
<b>C-AHT3</b>	<b>MOC100102</b>	(Mini Clubman)	14" - 14.5"	24"
<b>C-AHT4</b>	<b>MOC1013</b>	(Mini)	12"	14"
<b>MOC1017</b>	<b>MOC1015</b>	Pre-engage starter to '92	15"	22"
<b>MOC1016</b>	<b>MOC1014</b>	(12A engine/1992 ON)	15"	22"

### Oil Cooler Connections

- Oil temperature sender housing for special requirements when you need to know the temperature of the oil. Fitted before the oil cooler it will show maximum temperature reached. After the oil cooler it will show the more important temperature of the oil feeding the bearings. . . . . **MOC0T2**
- 1" long from bend push-fit 1/2" BSP thread union to fit oil cooler with 90° bend. Sold individually. . . . . **MOC207**
- 1" long from bend push-fit 1/2" BSP thread union to fit oil cooler with 45° bend. Sold individually. . . . . **MOC208**
- Original oil cooler union for oil filter. Supplied in complete kits. . . . . **MOC2**
- Original block union for oil cooler hose. Complete kits. . . . . **MOC1**
- Equivalent to number 9 and 10 as a kit, but with push-on ends for using oil cooler hose on special fitment in pairs only. . . . . **MOC3**
- Rubber oil-cooler hose sold per foot. i.e. 30cm. Order to length required . . . . . **C-AHH8537**



### Oil Cooler Thermostat

- The Mocal oil control thermostat is designed to prevent flow of engine oil until it has reached correct working temperature of about 80°C. Prolonged use of engine oil where it cannot reach its correct working temperature can cause sludge and crank case dilution, leading to excessive wear in crank bearings and cylinder bores. Fits into any convenient place where pipes can be cut and oil pipes run parallel. . . . . **MOC0T1**



### Braided Oil Filter Hoses

- Braided pipe for oil gauge, made to the required length of 4ft . . . . . **C-AHT9**
- Engine blocks to oil filter housing braided pipe kit. See chart below for part numbers

Fits Mini	Block Union Size	Filter Head Union Size	Order hose & union kit as
Pre 1992	5/8"	1/4NPT	<b>TAM2106BRAIDED</b>
Pre 1992	5/8"	11/16"unf	<b>MOC1019</b>
12A engine/1992 on	11/16"unf	11/16"unf	<b>MOC1018</b>
12A engine/1992 on	11/16"unf	1/4NPT	<b>MOC1020</b>

### Spin On Type Oil Filters

- a. Unipart first grade filter as fitted to new cars (spin on type). . . . . **GFE166**  
b. For twin point injection cars, 97on . . . . . **GFE280**
- Spin on type oil filter heads.  
a. Fits engines pre 1992 with 1/4npt union thread size. . . . . **TAM2097**  
b. Performance strengthened filter head type in billet alloy to stop leakage with 1/4npt union thread size. . . . . **12A2032RACE**
- MAGCOM pre filter magnet collects debris from engine oil. Screws to the block for spin-on type filter heads. Except MPI . . . . . **MF001**
- Remote oil filter kit. This kit fits all A series engines that have a 2 bolt fixing filter head and takes a spin on filter. Used by many motorsport enthusiasts to make the filter accessible where engine bay room is tight. . . . . **RFK9**



### Top Quality Oil

- Classic Castrol 20W/50 oil supplied in retro style 1 gallon metal tin. . . . . **CASTROL**
- Castrol jug metal pouring pint jug. . . . . **J105**
- Millers oil specially formulated for Mini engine & gearbox.  
a. 20W50, mineral . . . . . **MILLERS001**  
b. 20W50, semi synthetic . . . . . **MILLERS002**
- a. GTX 5 litre, 15W 40 grade . . . . . **GTX**  
b. Unipart 20W50, Good general oil for standard engines or to run engines in before using synthetic oils . . . . . **GUL7005T**  
c. Unipart Semi Synthetic 10W40, Superb all round use oil. . . . . **GUL2005B**  
d. Unipart Fully Synthetic 5W40 . . . . . **GUL1005B**



Good quality oil is very important in Mini's as it has the dual function of lubricating the engine and gearbox. Some oils have a detergent base in them for keeping engines clean, but this in turn can cause wear on such items as layshaft, differential pins and baulk rings. Many performance, race engines benefit by using synthetic oils, which help by coating parts to prevent wear. They should not be used for running-in periods, as synthetic oil also puts a coating on rings, which prevents them from bedding in / sealing properly. NOTE: Oil can only be sent with filter not as part of larger package.

