

- › Leading, durable performance technology
- › Precision fit
- › Expert advice and full service support

**SSD**

## **Service & Support Delivery**

Fan Belts | Poly-V Belts | Timing Belts | Automotive Hoses | Accessories



**ram**, a brand of Continental, manufactures and supplies quality fan, poly-v and timing belts as well as hoses and accessories for the automotive aftermarket. The **ram** philosophy is to provide more than just a product by offering expert product advice, product solutions and product quality that improves every customer's motoring experience.

# ram Fan Belts

All **ram** fan belts are manufactured locally in Uitenhage, Eastern Cape, at South Africa's only fan belt production plant. The factory, which exclusively produces **ram** belts, is fully ISO 9001:2000, ISO 14001 and OHSAS 18001 compliant, ensuring the **ram** quality promise and guaranteeing maximum value.

## Features and benefits:

- **Oil resistant square-woven backing fibre** – reduces surface fatigue while resisting cracking, oil and heat.
- **Treated polyester cord** – this high strength, low stretch tension member provides longer flex life and greater resistance to shock loads.
- **Fibre-reinforced cushion section** – supports the cords horizontally and keeps them in a straight line.
- **Moulded cog construction** – provides increased flexibility and dissipates heat easily, extending belt life.



## Fan belt troubleshooting guide

Ensure	Avoid
That you tension belt correctly	Belt squeal and slippage, or low tension belt flap
That you avoid unnecessary contamination of oil & water	Wet and oily belts which cause overheating and degradation
That you check bearings and mountings are undamaged	Cracking due to overheating belts. Bad mounting will affect alignment
That you check correct alignment	Excessive side wear and belt turnover
That you fit the belt to suitable pulleys	Slipping noisy belts that cannot be cured by continual re-tensioning

**ram** moulded cog cut edge fan belts are designed to give optimum performance and a long, trouble-free life if fitted and maintained correctly

Tension Chart			
Belt Section	New Belt	Re-Tension	Absolute Minimum
10AV	50 kg 110 lbs	41 kg 90 lbs	32 kg 70 lbs
11AV	55 kg 120 lbs	45 kg 100 lbs	36 kg 80 lbs
13AV	59 kg 130 lbs	50 kg 110 lbs	41 kg 90 lbs
17AV	64 kg 140 lbs	55 kg 120 lbs	45 kg 100 lbs

**Belt replacement to be undertaken by a suitably qualified technician/workshop. Failure to do so will invalidate belt warranty.**



ram Poly-V belts are sourced from our factories around the world, in addition to being manufactured locally in Uitenhage at South Africa's only fan and Poly-V belt plant. Every Poly-V belt is designed to provide maximum lifespan, low noise and exceptional efficiency.

## Features and benefits:

- **Strong, low stretch tension members** – specially treated, high strength cords maintain tension and resist shock load failure.
- **Fibre-reinforced cushion section** – supports the cords and keeps them pulling together as a team.
- **Oil and abrasion-resistant backing fabric** – rubber impregnated fabric ensures superior heat and abrasion resistance.

## Poly-V belt troubleshooting guide

Symptoms	Cause	Remedy
Hardened, polished sides or grooves	<ol style="list-style-type: none"> <li>1. Incorrect tensioning (low tension)</li> <li>2. Misaligned pulley</li> <li>3. Tension member damaged due to incorrect installation</li> </ol>	<ol style="list-style-type: none"> <li>1. Fit and maintain to vehicle manufacturer's recommended tension</li> <li>2. Align pulley</li> <li>3. Install properly with new belt</li> </ol>
Uneven wear of ribs	<ol style="list-style-type: none"> <li>1. Substantial vibrations (incorrect tension)</li> <li>2. Misaligned pulley</li> </ol>	<ol style="list-style-type: none"> <li>1. Fit and maintain to vehicle manufacturer's recommended tension</li> <li>2. Align pulley</li> </ol>
Cracks and chunks out	<ol style="list-style-type: none"> <li>1. Excessive or low tension</li> <li>2. Ageing (hardened cushion section)</li> </ol>	<ol style="list-style-type: none"> <li>1. Fit and maintain to vehicle manufacturer's recommended tension</li> <li>2. Replace the belt</li> </ol>
Broken belt	<ol style="list-style-type: none"> <li>1. Belt folded prior to or during fitment due to careless handling</li> <li>2. Belt damaged during assembly by inappropriate tools</li> <li>3. Excessive belt tension</li> </ol>	<ol style="list-style-type: none"> <li>1. Avoid mishandling the belt</li> <li>2. Use only tools recommended by manufacturer</li> <li>3. Fit and maintain to vehicle manufacturer's recommended tension</li> </ol>
Material deposits	<ol style="list-style-type: none"> <li>1. Low tension setting</li> <li>2. Misaligned pulley</li> <li>3. Worn-out pulley</li> <li>4. Excessive torsional engine vibration</li> </ol>	<ol style="list-style-type: none"> <li>1. Fit and maintain to vehicle manufacturer's recommended tension</li> <li>2. Align pulley</li> <li>3. Replace pulley</li> <li>4. Check engine operation</li> </ol>
Noisy operation	<ol style="list-style-type: none"> <li>1. Insufficient tension</li> <li>2. Belt past its useful life</li> </ol>	<ol style="list-style-type: none"> <li>1. Fit and maintain to vehicle manufacturer's recommended tension</li> <li>2. Replace the belt</li> </ol>
Belt backside damage	<ol style="list-style-type: none"> <li>1. Backside idler pulley defective (sluggish, damaged surface)</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace the backside idler pulley and belt</li> </ol>
Excessive wear	<ol style="list-style-type: none"> <li>1. Excessive slip (low tension)</li> <li>2. Misaligned pulley</li> <li>3. Pulley grooves with uneven wear</li> </ol>	<ol style="list-style-type: none"> <li>1. Fit and maintain to vehicle manufacturer's recommended tension</li> <li>2. Align pulley</li> <li>3. Replace pulley</li> </ol>

**Belt replacement to be undertaken by a suitably qualified technician/workshop. Failure to do so will invalidate belt warranty.**

# Timing Belts

ram is able to offer customers the very latest in automotive drive belt technology.

Our timing belts are designed to deliver precise timing over a long service life and under demanding applications. The construction of timing belts is similar to that of fan belts and poly-v belts, but the compounds and cords differ substantially.



## Features and benefits:

- **Dimensionally stable cords** – constructed from fibreglass, they are shrink and stretch resistant, allowing for sustained accurate timing. The cords are, however, very brittle and any crimping will damage the cords inside the belt, resulting in premature belt failure. Therefore, please note the warning, “DO NOT CRIMP”, which can be found on the belt.
- **Finest quality compounds** – we have designed material compounds to ensure consistent performance and maximum durability in hot and oily engine environments. Although this compound is more expensive, it greatly eliminates the risk of belt failure and resulting engine damage.
- **Precision-moulded teeth** – are manufactured to achieve precise tolerances for pitch, width and length. This ensures that the belt meshes perfectly with the pulley, providing consistent and accurate engine timing.
- **Tough synthetic facing** – the fabric facing on the inside of the belt is specially designed to reduce pulley wear and provides resistance to abrasion, oil and ozone damage.

## Belt tooth profiles

Each ram timing belt is available with up to three different tooth profiles. Every variant is optimised to displace air caught between the belt and the pulley to eliminate noise where possible.

If you're unsure of which profile to fit, refer to the ram catalogue. Check that the part number is correct for that type of vehicle.

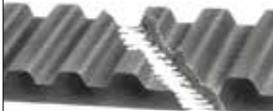
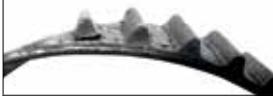
Alternatively, compare the new belt with the old one. Measure the belt width, tooth pitch (either 8 mm or 9.5 mm) and count the number of teeth. Ensure that they match precisely.

		Pulley Profile	Alternative 1	Alternative 2	Alternative 3
9.525 mm Pitch	HL		ISO ZB	modified ISO ZB	modified ISO ZB
	LH		ISO ZA	modified ISO ZA	modified ISO ZA
	H9.5P		ISO ZH	ISO ZR	
			ISO ZR	modified ISO ZR	
	H9.5PII		modified ISO ZH	modified ISO ZR	
	S9.5T		ISO ZS		
8 mm Pitch	H8P		ISO YH	ISO YR	
			ISO YR	modified ISO YR	
	H8PII		modified ISO YH	ISO YS	modified ISO YR
	S8T		ISO YS		

# Timing Belts

## Timing belt troubleshooting guide

There are a number of reasons why belts fail. Below is a quick guide to the most common problems and what causes them.

Problem	Cause	Remedy
<b>Broken Belt</b> 	<ol style="list-style-type: none"> <li>1. Belt crimped prior to or during fitment due to careless handling</li> <li>2. Belt damaged during fitting by inappropriate tools</li> <li>3. Excessive belt tension</li> </ol>	<ol style="list-style-type: none"> <li>1. Avoid mishandling belt (DO NOT CRIMP)</li> <li>2. Use only tools recommended by the manufacturer</li> <li>3. Fit and maintain to vehicle manufacturer's recommended tension</li> </ol>
<b>Edge Wear</b> 	<ol style="list-style-type: none"> <li>1. Pulley flange damaged</li> <li>2. Pulley misaligned</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace pulley</li> <li>2. Check alignment and replace worn or damaged pulleys</li> </ol>
<b>Broken Belt (jagged)</b> 	<ol style="list-style-type: none"> <li>1. Foreign body in drive</li> <li>2. Low tension due to incorrect fitment (belt rides over pulley edge)</li> <li>3. Component seized in the drive</li> <li>4. Excessive belt tension</li> </ol>	<ol style="list-style-type: none"> <li>1. Ensure cover is fitted</li> <li>2. Fit and maintain to vehicle manufacturer's recommended tension</li> <li>3. Check the condition of the components and replace if worn or damaged</li> <li>4. Tension the belt correctly</li> </ol>
<b>Sheared Teeth</b> 	<ol style="list-style-type: none"> <li>1. Low tension due to incorrect fitment</li> <li>2. Drive component seized</li> <li>3. Misaligned pulleys</li> </ol>	<ol style="list-style-type: none"> <li>1. Fit and maintain to vehicle manufacturer's recommended tension</li> <li>2. Investigate and replace worn/damaged components</li> <li>3. Align pulleys</li> </ol>
<b>Hi-Tension Failure</b> 	<ol style="list-style-type: none"> <li>1. Belt over-tensioned</li> </ol>	<ol style="list-style-type: none"> <li>1. Fit and maintain to vehicle manufacturer's recommended tension</li> </ol>
<b>Oil Contamination</b> 	<ol style="list-style-type: none"> <li>1. Engine oil leak</li> </ol>	<ol style="list-style-type: none"> <li>1. Cure oil leak</li> </ol>
<b>Hollow Teeth</b> 	<ol style="list-style-type: none"> <li>1. Low tension setting (due to incorrect fitment)</li> <li>2. Running tension too low (due to incorrect fitment)</li> </ol>	<ol style="list-style-type: none"> <li>1. Fit and maintain to vehicle manufacturer's recommended tension</li> <li>2. Check tensioner serviceability</li> </ol>

**Note:** It is recommended that tensioners and idlers on the drive are replaced at the same time as the belt.

## Your guarantee of quality

All **ram** timing belts carry an unconditional warranty against any defects in materials or faulty workmanship, provided they are replaced as per the OE vehicle manufacturer's service recommendation.

All **ram** timing belts are manufactured to OE vehicle specifications and standards and **do not have a limited kilometre warranty.**

**Note:** Replace all tensioners and idler pulleys at the same time as the belt is replaced. Failure to do so will invalidate the warranty. In addition belt replacement must be undertaken by a suitably qualified technician/workshop. Failure to do so will also invalidate the warranty.

## Moulded Radiator Hose

Designed to OE specifications and to meet SAE J20R4 standards. Knitted reinforcement and EPDM construction give high strength and resistance to heat, ozone attack and all recommended coolants. Where necessary, hoses on lower connection (suction) have a steel spring coil to prevent collapse. **ram** hoses cater for vehicles where the coolant flows in reverse, i.e. from bottom to top. Truck hoses are also available.

**Note:** Generally hoses do not show visual wear, therefore, they must be checked regularly to prevent overheating or clogging of the coolant system. ALWAYS REPLACE SOFT OR BRITTLE HOSES.



## Rubber Fuel Line Hose

The oil and petrol resistant Hysunite rubber cover withstands exposure to fuel, vapour, heat and moisture. The inner rubber tube is specially compounded to resist petrol, oil, diesel and other fuels. High strength synthetic textile reinforcement brings the minimum burst pressure to 175 psi (1200 kPa). Meets SAE J30R7 specifications. Available in 5 mm, 6.3 mm, 7.9 mm, 10 mm and 12 mm Internal Diameter and in 1 m, 10 m and 152 m lengths.

**WARNING:** Do not use for pressure line on fuel injected vehicles.



## Cotton Covered Fuel Hose

The tube is a PVC Nitrile compound specifically formulated for petrol and diesel conveyance and under bonnet conditions. A polyester braid covers the tube to give it protection against ozone attack, abrasion or accidental cutting. The braid and tube are specially bonded to give a harmonious working hose without sacrificing flexibility.



## Air Brake Hose

For compressed air brake systems on trucks and buses. Reinforced with braided reinforced synthetic cord for high performance and strength. Used with standard air brake replaceable couplings. Built to meet SAE J1402 specifications and DOT regulation FMVSS-106. Tube and cover are oil resistant.



## Heater Hose

Our HY-T heater hose is designed as an economical replacement for OE heater hose on auto and truck cooling system applications. HY-T heater hose is constructed from Versigard synthetic rubber tube and covered with two spiral layers of fibre reinforcement. Operating temperature range is -40° C to 125° C. Similar to SAE 20R3-D2.

**WARNING:** Do not use in fuel applications.



## Galaxy Air Conditioning Hose

Provides protection against refrigerant effusion in automotive air conditioning systems. Meets SAE J2064 "TYPE C Class 2" hose performance and SAE J51-A2 outside diameters. Compatible with R-12 / R134a refrigerants, mineral oils and PAG's. Temperature range -40° C to 125° C. By reducing emissions of Freon into the atmosphere, the Galaxy hose helps to reduce the destructive environmental effects of automotive refrigerants.



## Filler Neck Hose

**ram** fuel filler neck hose has been specifically designed to connect to fuel tanks on passenger cars, light trucks, boats, construction equipment and off-road vehicles. The PVC Nitrile tube has excellent resistance to leaded petrol, unleaded petrol and diesel. The **ram** hoses are non-reinforced and moulded to suit specific applications. Some straight filler neck hoses are available in 1 m lengths and the following I.D's: 38 mm, 45 mm, 48 mm, 50 mm, 57 mm, 67 mm.



## 90 Degree Bend Hose

I.D.	Part number	Leg Size
13 mm	RH7013	180 mm
16 mm	RH7016	180 mm
20 mm	RH7020	180 mm
25 mm	RH7025	180 mm
32 mm	RH7032	180 mm
38 mm	RH7038	180 mm
45 mm	RH7045	280 mm
50 mm	RH7050	280 mm
57 mm	RH7057	280 mm
65 mm	RH7065	340 mm



## Straight Radiator Hose

Covers a wide range of passenger cars, commercial vehicles, trucks, tractors and industrial applications. The hose is reinforced with rayon knit and will withstand heat, ozone attack and all recommended coolants. Available in 1 m lengths.



## Ramflex Hose

Precision-moulded in uniform lengths. Materials used resist ozone attack, high heat and all coolants used in modern day engines. Knitted reinforcement prevents splitting, ballooning and elongating. The inserted spring coil allows for extreme flexing and prevents collapse.



# Automotive Accessories

## Hose Clamps

**ram** hose clamps allow easy tightening and slackening of the band, as well as minimising electrolysis and corrosion, resulting in long, trouble-free clamping. All **ram** LC clamps are manufactured with a stainless steel band and screw support with a zinc-plated mild screw, except for the LC2 to LC6 ranges which have a zinc-plated screw support. Clamps are sold in boxes of 10.



## WELDIT Radiator Seal

Save on expensive repair costs with **ram** WELDIT which quickly seals leaks in radiators, heaters, connections, cracked blocks and gaskets. WELDIT prevents further corrosion and lubricates the water pump while making a permanent seal. WELDIT will not clog the radiator and is compatible with antifreeze additives. Available in an attractive display stand which holds 24 vials (WIK24), or alternatively, a refill containing 12 vials (WIK12).



## Lever-Vent Radiator Caps

Lever-vent radiator caps are designed for applications where safety of personnel is a pre-requisite. The positive lever action allows pressure to escape by simply lifting the lever. This lever action prevents dirt blocking the valve system as well as safeguarding the user, by preventing the threat of hand-burning while releasing pressure. The lever-vent cap is available for most vehicles, including light commercials, heavy-duty trucks and off-road vehicles.



## ram Belt Measuring Stick

The **ram** belt measuring stick is an essential tool that enables the user to establish the correct **ram** part number for fan belts and poly-v belts. The measuring stick is particularly helpful when original part numbers cannot be identified on old and worn belts. With the belt measuring stick, belts do not have to be turned inside out for measuring.



## Spare Wheel Ready

**ram** developed the Spare Wheel Ready, a universal-fit rubber extension that is connected to the valve on the spare wheel to facilitate effortless tyre pressure checks. Spare Wheel Ready is easy to install and offers various installation options depending on the location of the spare wheel on a vehicle and a customer's preference.



## Anti-Freeze

The **ram** anti-freeze range of products is suitable for any automotive application as it acts as both an anti-freeze and a coolant, and is recommended for all water-cooled petrol and diesel engines. Its Monoethylene Glycol-based formula retards overheating by lubricating the water pump, prevents rust and corrosion as well as minimises scale and sludge build-up. **ram** anti-freeze is available in three variants: Anti-freeze 20% Concentrate, 50/50 and 94% Concentrate. Available in 1L and 5L bottles.



## Belt Racking

**ram** belt racking allows automotive fan belts and poly-v belts to be stored on wall-mounted racks in a professional, neat and tidy manner. This preferred method of storage permits stock control and requires minimum space. The wall racks are easy to install and come complete with belt hooks.

## Contact

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