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# Alvis Parts Specification Lists

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List No.: **E177**

Component: **Front Axle**

Type: **FA 12-50**

Drawing No.	Description	No.	Material	Specification		Remarks
N6638	Crown Wheel 4.55:1 Ratio	1				B.O. For first fifty Chassis only. Alternative to N7353, page 9.
N6607	Differential Box Casing - male	1	Med. Car. Steel	Stamping	Die No. N6607	
N6608	Differential Box Casing - female	1	Med. Car. Steel	Stamping	Die No. N6608	
N6725	Bolt for Differential Box and Crown Wheel	8	Nickel Chrome Bar	Hex. Bar	0.520"/0.525" x 2 3/4" long	B.O. First 50 sets made here
N6726	Nut for above Bolt	8	Bright Bolt Steel	Bar	11/16" dia x 5/8" long	
1/16" dia.	Split Pin	8	Steel		1/16" dia x 3/4" long	
N6609	Star Centre for Differential	1	Man. C.H. Steel	Stamping	Die No. N6609	
N6611	Differential Bevel Pinion	4	5% Nic. C.H. Steel	Bar	2 1/4" dia x 1 1/8" long	B.O.
N6610	Differential Crown Wheel	2	5% Nic. C.H. Steel	Stamping	Die No. N6610	B.O.
N6889	Splined Shaft for Differential	2	Nic. Chrome Bar	Bar	1 3/8" dia x 5 1/4" long	
N4268	Bush for Star Centre	2	Aluminium Alloy L8	Cast Bar	1 3/4" dia x 3/4" long	
	Ball Bearing for Differential Box	2			50 x 90 x 20 Hoffman No. 150 Deep Groove	B.O.
	Ball Bearing for Differential Box	2			35 x 80 x 21 Hoffman No. 335	B.O.
N5019	Shim for Differential Ball Bearing		Brass Sheet	Pressing	3 5/8" x 3 5/8" x 33 S.W.G.	No. per set arranged by Fitter
N5063	Shim for Differential Ball Bearing		Brass Sheet	Pressing	3 5/8" x 3 5/8" x 45 S.W.G.	No. per set arranged by Fitter
N5062	Housing for Differential Ball Bearing	2	Black Mild Bar	Bar	4 1/4" dia x 2 1/2" long	First 50 sets only to be made from Bar. Future sets to be made from Stampings.
N1117	Differential Pinion Washer	4	Phos. Bronze	Cast Bar	1 1/4" dia x 5/16" long	

<b>Drawing No.</b>	<b>Description</b>	<b>No.</b>	<b>Material</b>	<b>Specification</b>		<b>Remarks</b>
N6523	<i>Inner Front Hub O.S.</i>	1	<i>Man. C.H. Steel</i>	<i>Bar</i>	<i>4 1/8" dia x 8 1/4" long</i>	
N6524	<i>Inner Front Hub N.S.</i>	1	<i>Man. C.H. Steel</i>	<i>Bar</i>	<i>4 1/8" dia x 8 1/4" long</i>	
	<i>Ball Bearing for Front Hub</i>	4			<i>3 3/4" x 5 1/4" x 3/4"</i> <i>Hoffman XLS 3 3/4"</i>	<i>B.O.</i>
N6484	<i>Inner Distance Piece for Ball Race</i>	2	<i>Welded Tube</i>	<i>Tube</i>	<i>4" o/dia x 10 S.W.G. x 1 3/8" long</i>	
N6483	<i>Outer Distance Piece for Ball Race</i>	2	<i>Mild Tube Hard</i>	<i>Tube</i>	<i>5 1/4" o/dia x 10 S.W.G. x 1 3/8" long</i>	
N6485	<i>Lock Nut for Front Hub</i>	2	<i>Aluminium</i>	<i>Casting</i>	<i>Patt. No. N6485</i>	
N6486	<i>Lock Nut for Inner Front Hub</i>	2	<i>Black Mild Bar</i>	<i>Bar</i>	<i>4 5/8" dia x 5/8" long</i>	
N6477	<i>Front Hub N.S.</i>	1	<i>Med. Car. Steel</i>	<i>Stamping</i>	<i>Die No. N6477</i>	
N6478	<i>Front Hub O.S.</i>	1	<i>Med. Car. Steel</i>	<i>Stamping</i>	<i>Die No. N6477</i>	
N6479	<i>Front Hub Housing - top half</i>	2	<i>Cast Steel</i>	<i>Casting</i>	<i>Patt. No. N6479</i>	
N6480	<i>Front Hub Housing - bottom half</i>	2	<i>Cast Steel</i>	<i>Casting</i>	<i>Patt. No. N6480</i>	
N6497	<i>Stud for Front Hub Housing</i>	12	<i>Nic. Chrome Bar</i>	<i>Bar</i>	<i>5/16" dia x 4 1/8" long</i>	<i>B.O. First 50 sets made here</i>
<i>2 - 5/16"</i>	<i>Nut for above Stud</i>	24				
<i>1/16" dia</i>	<i>Split Pin</i>	24	<i>Steel</i>		<i>1/16" dia x 5/8" long</i>	
N6488	<i>Thrust Washer for Axle Pivot</i>	4	<i>Phos. Bronze</i>	<i>Cast Bar</i>	<i>2 1/2" dia x 1/4" long</i>	
	<i>Felt Packing for Spherical Housing</i>	4	<i>Felt Strip</i>		<i>5m/m x 3m/m x 10 5/8" long</i>	

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<b>Drawing No.</b>	<b>Description</b>	<b>No.</b>	<b>Material</b>	<b>Specification</b>		<b>Remarks</b>
<i>N6481</i>	<i>Front Axle Shaft</i>	<i>2</i>	<i>Nic. Chrome Shaft</i>	<i>Stamping</i>	<i>Die No. N6481</i>	
			<i>Stamping</i>			
<i>N6476</i>	<i>Driving Pin for Universal Joint</i>	<i>4</i>	<i>Poldi Boz</i>	<i>Bar</i>	<i>13/16" dia x 3 3/8" long</i>	
<i>N6482</i>	<i>Ball for Universal Joint</i>	<i>8</i>	<i>Man. C.H. Steel</i>	<i>Bar</i>	<i>1 3/8" dia x 1 1/16" long</i>	<i>B.O.</i>
<i>N6492</i>	<i>Dust Cover on Axle Shaft</i>	<i>2</i>	<i>Aluminium</i>	<i>Cast Bar</i>	<i>2 5/8" dia x 1" long</i>	
<i>7 - 1/4" - 7/8"</i>	<i>Cheese-head Screw for above</i>	<i>4</i>				
	<i>Gaiter for Front Hub Housing</i>	<i>2</i>	<i>Moulded Rubber</i>		<i>"Desmo"</i>	<i>B.O.</i>
<i>N7348</i>	<i>Spring for Front Axle Shaft</i>	<i>2</i>	<i>Car. Coil Spring</i>			<i>B.O.</i>
<i>N6487</i>	<i>Bush for Pivot Pin</i>	<i>4</i>	<i>Phos. Bronze</i>	<i>Cast Bar</i>	<i>1 3/4" dia x 1 3/4" long</i>	
<i>N6493</i>	<i>Front Spring Shackle Pin</i>	<i>4</i>	<i>Man. C.H. Steel</i>	<i>Bar</i>	<i>1 1/8" dia x 7 1/8" long</i>	
<i>N2737</i>	<i>Nut for Shackle Pin 5/8" BSF</i>	<i>4</i>				<i>B.O.</i>
<i>1/8" dia</i>	<i>Split Pin</i>	<i>4</i>	<i>Steel</i>		<i>1/8" dia x 1 3/8" long</i>	

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<b>Drawing No.</b>	<b>Description</b>	<b>No.</b>	<b>Material</b>	<b>Specification</b>		<b>Remarks</b>
<i>N6494</i>	<i>Washer for Front Spring</i>	<i>8</i>	<i>Man. C.H. Steel</i>	<i>Bar</i>	<i>1 3/16" dia x 1 3/8" long</i>	
<i>N6495</i>	<i>Steering Arm</i>	<i>2</i>	<i>45 Ton Alloy</i>	<i>Stamping</i>	<i>Die No. N6495</i>	
	<i>Key for Steering Arm</i>	<i>2</i>	<i>Key Steel</i>		<i>1/4" x 1/4" x 1" long</i>	
<i>N6496</i>	<i>Nut for Steering Arm</i>	<i>2</i>	<i>Bright Bolt Steel</i>	<i>Bar</i>	<i>1 1/2" dia x 7/8" long</i>	
<i>1/8" dia</i>	<i>Split Pin</i>	<i>2</i>	<i>Steel</i>		<i>1/8" dia x 1 3/4" long</i>	
<i>N6950</i>	<i>Oil Container in Front Hub</i>	<i>2</i>	<i>Aluminium</i>	<i>Casting</i>	<i>Patt. No. N6950</i>	
<i>N6951</i>	<i>Grub Screw for Oil Container</i>	<i>2</i>	<i>Bright Bolt Steel</i>	<i>Bar</i>	<i>1/4" dia x 3/8" long</i>	
<i>N6642</i>	<i>Plug for Oil Container</i>	<i>2</i>	<i>Aluminium</i>	<i>Cast Bar</i>	<i>1 3/8" dia x 7/8" long</i>	<i>See also Engine Spec. page 9</i>
	<i>Siphon Wick for Oil Container</i>	<i>2</i>			<i>1/8" dia x 18" long</i>	
<i>N6999</i>	<i>Dust Cover for Front Hub</i>	<i>2</i>	<i>Aluminium Sheet</i>	<i>Pressing</i>	<i>2 3/8" x 2 3/8" x 16 S.W.G.</i>	

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Drawing No.	Description	No.	Material	Specification	Remarks
N6874	Inner Housing for Universal Joint N.S.	1	Man. C.H. Steel	Stamping Die No. N6874	
N6875	Inner Housing for Universal Joint O.S.	1	Man. C.H. Steel	Stamping Die No. N6874	
N4332	Washer for Splined Shaft	2	Bright Bolt Steel	Bar 1 1/4" dia x 5/16" long	
N4274	Nut for Splined Shaft	4	Bright Bolt Steel	Hex. Bar 1.092"/1.100" x 1/2" long	
N4346	Lock Washer for Splined Shaft	2	Mild Sheet	Pressing 1 9/16" wide x 16 S.W.G. x 1 3/8" long	
N6877	Brake Drum Cover N.S.	1	Aluminium	Casting Patt. No. N6877	
N6878	Brake Drum Cover O.S.	1	Aluminium	Casting Patt. No. N6877	
N6904	Stud for Brake Drum Cover	14	Nic. Chrome Bar	Bar 3/8" dia x 2 3/8" long	B.O.
2 - 3/8"	Nut for above Stud	14			
28 - 17	Plain Washer 3/8" dia	14		3/4" dia x 1/16" thick	
1/16" dia	Split Pin	14	Steel	1/16" dia x 3/4" long	
N6690	Front Brake Drum	2	Cast Iron	Casting Patt. No. N6690	See also Rear Axle specifications.
N5023	Bolt for Brake Drum	12	Nic. Chrome Bar	Hex. Bar .595"/.600" x 1 3/8" long	B.O. See also Rear Axle specifications.
2 - 3/8"	Nut for above Bolt	12			
1/16" dia	Split Pin	12	Steel	1/16" dia x 3/4" long	

<b>Drawing No.</b>	<b>Description</b>	<b>No.</b>	<b>Material</b>	<b>Specification</b>		<b>Remarks</b>
<i>N6876</i>	<i>Front Brake Shoes - in pairs, N.S.</i>	<i>1</i>	<i>Cast Iron</i>	<i>Casting</i>	<i>Patt. No. N6876</i>	
<i>N7138</i>	<i>Front Brake Shoes - in pairs, O.S.</i>	<i>1</i>	<i>Cast Iron</i>	<i>Casting</i>	<i>Patt. No. N7138</i>	
<i>N5018</i>	<i>Brake Shoe Lining</i>	<i>4</i>	<i>Ferodo Bonded Asbestos</i>	<i>Die- pressed</i>	<i>3/16" thick</i>	<i>B.O. See also Rear Axle Specification</i>
	<i>Rivet for Brake Lining</i>	<i>28</i>	<i>Aluminium</i>		<i>C/sk Head 3/16" dia x 1/2" long</i>	
<i>N5105</i>	<i>Brake Shoe Release Spring</i>	<i>4</i>	<i>Car. Coil Spring</i>			<i>B.O. See also Rear Axle Specification</i>
<i>N6883</i>	<i>Brake Shoe Pivot Pin</i>	<i>4</i>	<i>Nic. Chrome Bar</i>	<i>Bar</i>	<i>1 1/8" dia x 1 11/16" long</i>	
	<i>Nut for Pivot Pin</i>	<i>4</i>			<i>1/2" B.S.F. Slotted, 8m/m thick</i>	
<i>3/32" dia</i>	<i>Split Pin</i>	<i>4</i>	<i>Steel</i>		<i>3/32" dia x 1 1/8" long</i>	
<i>N6884</i>	<i>Front Brake Camshaft N.S.</i>	<i>2</i>	<i>Man. C.H. Steel</i>	<i>Stamping</i>	<i>Die No. N4470</i>	
<i>N6885</i>	<i>Front Brake Camshaft O.S.</i>	<i>2</i>	<i>Man. C.H. Steel</i>	<i>Stamping</i>	<i>Die No. N4470</i>	
<i>N6779</i>	<i>Bush for Brake Camshaft</i>	<i>4</i>			<i>Bound Brook Oilless</i>	<i>B.O.</i>
<i>N6879</i>	<i>Front Brake Lever</i>	<i>2</i>	<i>Med. Car. Steel</i>	<i>Stamping</i>	<i>Die No. N6879</i>	
<i>N6778</i>	<i>Brake Cam Actuating Lever</i>	<i>2</i>	<i>Med. Car. Steel</i>	<i>Stamping</i>	<i>Die No. N6778</i>	
	<i>Taper Pin for above Levers</i>	<i>4</i>	<i>Steel</i>		<i>No.3 x 1 1/2" long</i>	
	<i>Key for above Levers</i>	<i>4</i>	<i>Key Steel</i>		<i>1/4" x 1/4" x 3/4" long</i>	

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<b>Drawing No.</b>	<b>Description</b>	<b>No.</b>	<b>Material</b>	<b>Specification</b>		<b>Remarks</b>
<i>N6880</i>	<i>Fork End for Front Brake Lever</i>	<i>2</i>	<i>Med. Car. Steel</i>	<i>Stamping</i>	<i>Die No. N6880</i>	
<i>N6881</i>	<i>Joint Pin for above Fork End</i>	<i>2</i>	<i>Nic. Chrome Bar</i>	<i>Bar</i>	<i>1/2" dia x 1 7/16" long</i>	
<i>3/32" dia</i>	<i>Split Pin</i>	<i>2</i>	<i>Steel</i>		<i>3/32" dia x 3/4" long</i>	
<i>N2036</i>	<i>Fork End for Actuating Lever</i>	<i>2</i>	<i>Med. Car. Steel</i>	<i>Stamping</i>	<i>Die No. N2036</i>	
<i>21-17</i>	<i>Joint Pin for Fork End 5/16" dia</i>	<i>2</i>				<i>B.O.</i>
<i>3/32" dia</i>	<i>Split Pin</i>	<i>2</i>	<i>Steel</i>		<i>3/32" dia x 3/4" long</i>	
<i>N7119</i>	<i>Adjusting Rod for Brake Levers</i>	<i>2</i>	<i>Bright Bolt Steel</i>	<i>Bar</i>	<i>5/16" dia x 5 1/2" long</i>	
<i>N6887</i>	<i>Ball for Brake Lever</i>	<i>2</i>	<i>Cast Iron</i>	<i>Cast Bar</i>	<i>1 3/8" dia x 1" long</i>	
<i>N6886</i>	<i>Beam for Brake Levers</i>	<i>1</i>	<i>Med. Car. Steel</i>	<i>Stamping</i>	<i>Die No. N6886</i>	
<i>N6888</i>	<i>Ball Retaining Set Screw</i>	<i>2</i>	<i>Bright Bolt Steel</i>	<i>Bar</i>	<i>5/8" dia x 1/2" long</i>	



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<b>Drawing No.</b>	<b>Description</b>	<b>No.</b>	<b>Material</b>	<b>Specification</b>		<b>Remarks</b>
N6643	<i>Front Spring, R.H.</i>		<i>Silico-Man. Steel</i>			<i>B.O. Cancelled by N7145-8, page 9</i>
N6644	<i>Front Spring, L.H.</i>		<i>Silico-Man. Steel</i>			<i>B.O. Cancelled by N7145-8, page 9</i>
N6687	<i>Rebound Clip - top</i>	<i>16</i>	<i>Mild Steel</i>	<i>Stamping</i>	<i>Die No. N6687</i>	<i>See also Rear Axle Specification</i>
N6688	<i>Rebound Clip - Bottom</i>	<i>16</i>	<i>Mild Steel</i>	<i>Stamping</i>	<i>Die No. N6687</i>	<i>See also Rear Axle Specification</i>
N6965	<i>Stud for Rebound Clip - long</i>	<i>16</i>	<i>Nic. Chrome Bar</i>	<i>Bar</i>	<i>3/8" dia x 3 7/8" long</i>	<i>B.O.</i>
N6966	<i>Stud for Rebound Clip - short</i>	<i>16</i>	<i>Nic. Chrome Bar</i>	<i>Bar</i>	<i>3/8" dia x 3 5/8" long</i>	<i>B.O.</i>
<i>1 - 3/8"</i>	<i>Nut for above Studs</i>	<i>32</i>				
N6967	<i>Rebound Spring</i>	<i>32</i>	<i>Car. Coil Spring</i>			<i>B.O. See also Rear Axle Specification</i>
N6692	<i>Centre Stud for Front Spring</i>	<i>4</i>	<i>Nic. Chrome Bar</i>	<i>Bar</i>	<i>1/2" dia x 11 5/8" long</i>	<i>B.O.</i>
<i>1 - 1/2"</i>	<i>Nut for above Stud</i>	<i>4</i>				
<i>2 - 1/2"</i>	<i>Nut for above Stud</i>	<i>4</i>				
<i>28-27</i>	<i>Plain Washer 1/2" dia</i>	<i>4</i>			<i>1 1/8" dia x 3/32" thick</i>	
<i>3/32" dia</i>	<i>Split Pin</i>	<i>4</i>	<i>Steel</i>		<i>3/32" dia x 1 1/8" long</i>	
N6617	<i>Distance Tube for Front Spring</i>	<i>4</i>	<i>Mild Tube Hard</i>	<i>Tube</i>	<i>3/4" o/dia x 11 S.W.G. x 8" long</i>	
N2656	<i>Lock Nut for Rebound Spring</i>	<i>32</i>	<i>Bright Bolt Steel</i>		<i>3/8" B.S.F. x 1/4" thick</i>	<i>B.O. See also Rear Axle Specification</i>

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<b>Drawing No.</b>	<b>Description</b>	<b>No.</b>	<b>Material</b>	<b>Specification</b>		<b>Remarks</b>
<i>N6903</i>	<i>Front Spring Clip</i>	<i>8</i>	<i>Med. Car. Steel</i>	<i>Stamping</i>	<i>Die No. N6903</i>	
<i>N6618</i>	<i>Distance Tube for Front Spring - long</i>	<i>8</i>	<i>Mild Tube Hard</i>	<i>Tube</i>	<i>3/4" o/dia x 11 S.W.G. x 7 3/4" long</i>	
<i>N6691</i>	<i>Stud for Front Spring Clip</i>	<i>8</i>	<i>Nic. Chrome Bar</i>	<i>Bar</i>	<i>1/2" dia x 12 3/4" long</i>	<i>B.O.</i>
<i>1 - 1/2"</i>	<i>Nut for above Stud</i>	<i>8</i>				
<i>2 - 1/2"</i>	<i>Nut for above Stud</i>	<i>8</i>				
<i>28 - 27</i>	<i>Plain Washer - 1/2" dia</i>	<i>8</i>			<i>1 1/8" dia x 3/32" thick</i>	
<i>3/32" dia</i>	<i>Split Pin</i>	<i>8</i>	<i>Steel</i>		<i>3/32" dia x 1 1/8" long</i>	
<i>N7108</i>	<i>Packing Strip for Front Spring</i>	<i>8</i>	<i>Mild Sheet</i>	<i>Pressing</i>	<i>1/4" thick</i>	<i>B.O.</i>
	<i>Gaiter for Inner Housing</i>	<i>2</i>	<i>Moulded Rubber</i>		<i>"Desmo"</i>	<i>B.O.</i>
<i>N7146</i>	<i>Front Spring - R.H. Top</i>	<i>2</i>	<i>Silico-Man. Steel</i>			<i>B.O.</i>
<i>N7145</i>	<i>Front Spring - L.H. Top</i>	<i>2</i>	<i>Silico-Man. Steel</i>			<i>B.O.</i>
<i>N7147</i>	<i>Front Spring - R.H. Bottom</i>	<i>2</i>	<i>Silico-Man. Steel</i>			<i>B.O.</i>
<i>N7148</i>	<i>Front Spring - L.H. Bottom</i>	<i>2</i>	<i>Silico-Man. Steel</i>			<i>B.O.</i>
<i>N7353</i>	<i>Crown Wheel - 4.777:1 Ratio</i>	<i>1</i>	<i>5% Nic. C.H. Steel</i>			<i>B.O. For second fifty Chassis. Alternative to N6638, page 1</i>