

# GEAR

*Drive Gear, Armature Gear,  
Idle Gear, Planetary Gear,  
Special Gear*

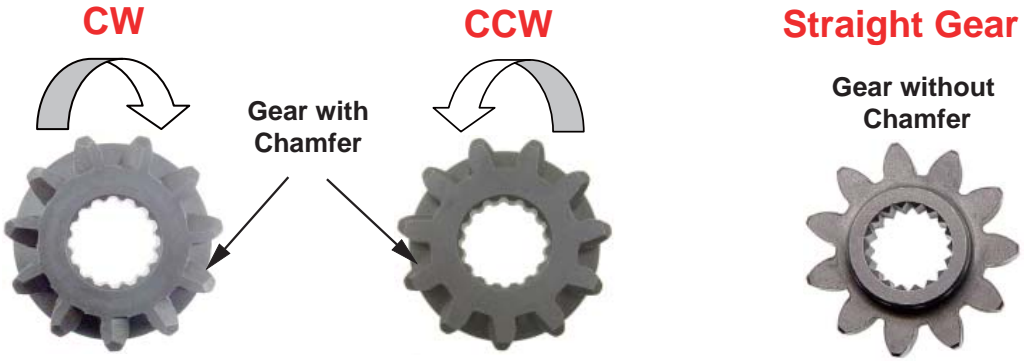


**Metro Auto Industrial Inc.**

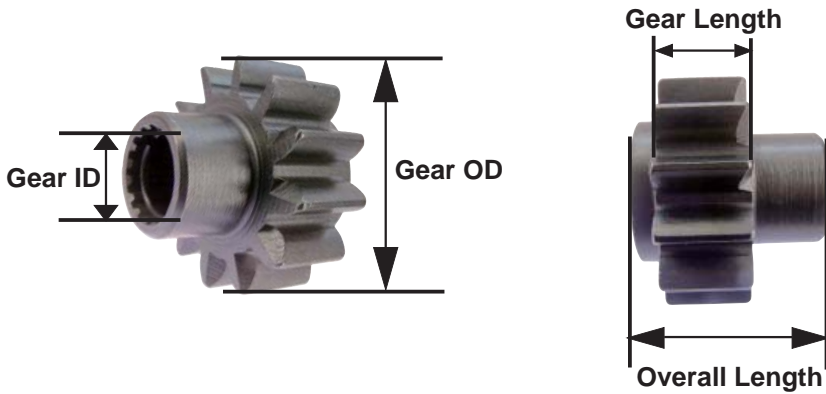
**Toll Free: 1-800-263-8761**

# How to measure the Gear

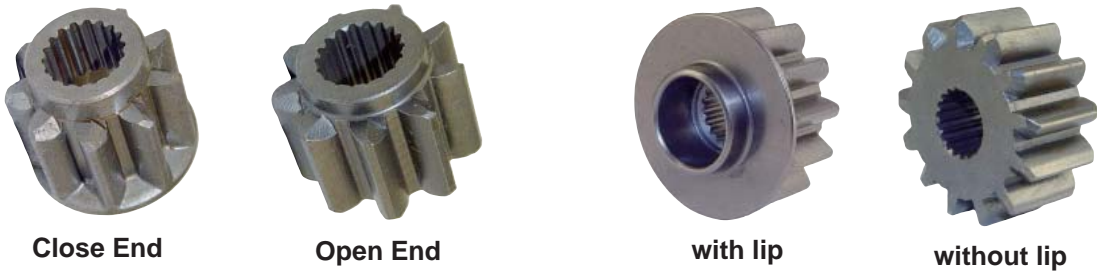
## Gear Rotation



## Gear Size



## Gear Type



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# 8 Teeth Gear

8 Teeth	8 Teeth	8 Teeth
<p style="text-align: center;"><b>No Photo Available</b></p> <p style="text-align: center;"><b>54-82125 Pinion Gear 8T, CW, 10 Spline</b></p> <p><b>For:</b> Hitachi OSGR Starters  <b>Replaces:</b>  <b>Lester:</b>  <b>OEM:</b>  <b>Dim:</b> Gear OD 28.5mm,  Gear ID 12mm, Tooth Length 13mm  Gear OAL 87mm  <b>Ref:</b>  <b>Note:</b> Open End.  Similar to 54-82125-1, except ....</p>	 <p style="text-align: center;"><b>54-82116 Pinion Gear 8T, CCW, 10 Spline</b></p> <p><b>For:</b> Hitachi OSGR Starters  <b>Replaces:</b>  <b>Lester:</b>  <b>OEM:</b>  <b>Dim:</b> Gear OD 28.5mm,  Gear ID mm, Tooth Length 22mm  Gear OAL 94mm  <b>Ref:</b>  <b>Note:</b> Open End.</p>	
<p style="text-align: center;"><b>No Photo Available</b></p> <p style="text-align: center;"><b>54-82125-1 Pinion Gear 8T, CW, 10 Spline</b></p> <p><b>For:</b> Hitachi OSGR Starters  <b>Replaces:</b>  <b>Lester:</b>  <b>OEM:</b>  <b>Dim:</b> Gear OD 28.5mm,  Gear ID 12mm, Tooth Length 13mm  Gear OAL 87mm  <b>Ref:</b> 54-81205  <b>Note:</b> Close End.  Similar to 54-82125, except .....</p>		

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# 9 Teeth Gear

9 Teeth	9 Teeth	9 Teeth
 <p><b>54-82110</b> <b>Pinion Gear</b> <b>9T, CW, 18 Spline</b></p> <p><b>For:</b> Hitachi OSGR Starters  <b>Replaces:</b>  <b>Lester:</b> 17138, 18492, 18492C, 18493, 18493C  <b>OEM:</b>  <b>Dim:</b> Gear OD 25mm,            Gear ID mm, Tooth Length 15mm            Gear OAL 87mm  <b>Ref:</b>  <b>Note:</b></p>	 <p><b>54-82211</b> <b>Pinion Gear</b> <b>9T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters  <b>Replaces:</b>  <b>Lester:</b>  <b>OEM:</b>  <b>Dim:</b> Gear OD 25mm,            Gear ID 13mm, Tooth Length 12mm            Gear OAL 24.1mm  <b>Ref:</b>  <b>Note:</b> One side chamfer.            Also see 54-82212 CCW, 54-82231 CW/            CCW.            For high performance use.</p>	 <p><b>54-82231</b> <b>Pinion Gear</b> <b>9T, CW/CCW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters  <b>Replaces:</b>  <b>Lester:</b>  <b>OEM:</b>  <b>Dim:</b> Gear OD 25mm,            Gear ID mm, Tooth Length 12mm            Gear OAL 23.45mm  <b>Ref:</b> IMIGP9  <b>Note:</b></p>
 <p><b>54-82111</b> <b>Pinion Gear</b> <b>9T, CCW, 18 Spline</b></p> <p><b>For:</b> Hitachi OSGR Starters  <b>Replaces:</b>  <b>Lester:</b>  <b>OEM:</b>  <b>Dim:</b> Gear OD 25mm,            Gear ID mm, Tooth Length 15.1mm            Gear OAL 87mm  <b>Ref:</b> SJ-0799A  <b>Note:</b></p>	 <p><b>54-82212</b> <b>Pinion Gear</b> <b>9T, CCW, 18 Spline</b></p> <p><b>For:</b> Hitachi OSGR Starters  <b>Replaces:</b>  <b>Lester:</b>  <b>OEM:</b>  <b>Dim:</b> Gear OD 25mm,            Gear ID 13.4mm, Tooth Length 12mm            Gear OAL 23.45mm  <b>Ref:</b>  <b>Note:</b></p>	 <p><b>HP54-91001</b> <b>Pinion Gear</b> <b>9T, Straight, Spline</b></p> <p><b>For:</b> Bosch Starters  <b>Replaces:</b>  <b>Lester:</b>  <b>OEM:</b>  <b>Dim:</b> Gear OD 25.36mm,            Gear ID 12mm, Tooth Length 10.9mm            Gear OAL 27mm  <b>Ref:</b>  <b>Note:</b>            - This is a special custom design Clutch            Gear for Bosch Clutch used on Chevy and            Ford engines.            - Work with HP54-91002 outside Gear.</p> <div style="display: flex; align-items: center; margin-top: 20px;">  <div style="margin-left: 10px;">HP54-91002</div> </div>

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# 9 Teeth Gear

9 Teeth	9 Teeth	9 Teeth
 <p><b>54-82187 Pinion Gear 9T, CW, 18 Spline</b></p> <p><b>For:</b> Mitsubishi OSGR Starters  <b>Replaces:</b> M605X36571, M605X31671  <b>Lester:</b> 16720, 16584 (MIT), 16738, 16866, 16982, 17172, 17173, 18248  <b>OEM:</b>  <b>Dim:</b> Gear OD 28.8mm,            Gear ID 15.9mm, Tooth Length 15mm            Gear OAL 18.8mm  <b>Ref:</b> 54-83210,  <b>Note:</b></p>	 <p><b>54-81120 Pinion Gear 9T, CW, 10 Spline</b></p> <p><b>For:</b> Hitachi OSGR Starters  <b>Replaces:</b> M2114-55008, 2114-85008  <b>Lester:</b> 16584, 16611, 16740, 16740, 16811, 16997, 17079, 17146, 17294, 18066, 18067, 18278, 18289, 18324, 19691, 31338  <b>OEM:</b>  <b>Dim:</b> Gear OD 29mm,            Gear ID mm, Tooth Length 15mm            Gear OAL 87mm  <b>Ref:</b> 54-81200, 6204-2557A  <b>Note:</b></p>	 <p><b>54-82133-1 Pinion Gear 9T, CW, 10 Spline</b></p> <p><b>For:</b> Denso DD Starters  <b>Replaces:</b> 028300-0660, 028300-0901, 028300-0911, 028300-1950, 028300-1951, 028300-3351  <b>Lester:</b> 16217, 16218, 16220, 16222, 16224, 16224, 16230, 16230, 16230, 16238, 16261, 16499, 16735, 16766, 16766, 16832, 16832, 16843, 16911, 16911, 17278, 17350, 17354, 17354, 17354, 17364, 18183, 30049, 30511, 30511, 30600  <b>OEM:</b>  <b>Dim:</b> Gear OD 29mm,            Gear ID 12.35mm, Tooth Length 16mm            Gear OAL 51.2mm  <b>Ref:</b> 54-8207, 6190-2367  <b>Note:</b></p>
 <p><b>54-82144-1 Pinion Gear 9T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters  <b>Replaces:</b> 028099-7560  <b>Lester:</b> 16839, 16853, 16884, 16975, 17027, 17028, 17087, 17089, 17090, 17100, 17101, 17118, 17119, 17189, 17189, 17297, 17298, 17299, 17331, 17331, 17345, 17346, 17373, 17374, 17375, 17375, 17378, 17379, 17382, 17392, 17494, 17533, 17546, 17547, 17556, 17617, 17665, 17851, 18151, 18157, 18173, 18182, 18291, 18291, 18298, 18987, 18995, 19914, 30610, 30752, 31312, 31354, 32285  <b>OEM:</b>  <b>Dim:</b> Gear OD 28.9mm,            Gear ID 17.1mm, Tooth Length 21mm            Gear OAL 25mm  <b>Ref:</b> 54-82217, 6290-2007  <b>Note:</b></p>	 <p><b>54-82101 Pinion Gear 9T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters  <b>Replaces:</b> 028099-3080, 028099-3088, 028099-3090, 028300-1603, 028371-1660  <b>Lester:</b> 16556, 16831, 17027, 17028, 17028, 17098, 17098, 17101, 17118, 17189, 17189, 17298, 17345, 17352, 17365, 17374, 17378, 17421, 17493, 17523, 17533, 17547, 17606, 17697, 17706, 17714, 17809, 17824 ... many  <b>OEM:</b>  <b>Dim:</b> Gear OD 29mm,            Gear ID 17.1mm, Tooth Length 16mm            Gear OAL 24.8mm  <b>Ref:</b> 5  <b>Note:</b></p>	 <p><b>54-82143 Pinion Gear 9T, CCW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters  <b>Replaces:</b> 028099-3110  <b>Lester:</b> 16696, 16696, 16696, 16730, 16730, 17170, 17170, 17242, 17274, 17676, 31350  <b>OEM:</b>  <b>Dim:</b> Gear OD 29mm,            Gear ID 16.8mm, Tooth Length 16.6mm            Gear OAL 23.3mm  <b>Ref:</b> 54-82208,  <b>Note:</b> Also see            54-82101 Flat gear for CW/CCW            54-82101-1 CW</p>

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# 9 Teeth Gear

9 Teeth	9 Teeth	9 Teeth
 <p><b>54-82145</b> <b>Pinion Gear</b> <b>9T, CW/CCW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> 16839, 16884, 17494, 17516, 17526, 17546, 17584, 17665 <b>OEM:</b> <b>Dim:</b> Gear OD 29mm, Gear ID 16.7mm, Tooth Length 21.6mm Gear OAL 25mm <b>Ref:</b> 54-82217 <b>Note:</b> 54-82184 Flat gear for CW or CCW close end</p>	 <p><b>54-82184</b> <b>Pinion Gear</b> <b>9T, CW/CCW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> 028099-7560 <b>Lester:</b> 16839, 16853, 16884, 17027, 17028, 17087, 17089, 17090, 17100, 17101, 17118, 17119, 17189, 17189, 17297, 17298, 17299, 17331, 17331, 17345 ... many <b>OEM:</b> <b>Dim:</b> Gear OD 29mm, Gear ID 17mm, Tooth Length 21mm Gear OAL 25mm <b>Ref:</b> 54-82207 <b>Note:</b> 54-82145 CCW open end</p>	 <p><b>54-855201</b> <b>Pinion Gear</b> <b>9T, CW, 6 Spline</b></p> <p><b>For:</b> Mitsuba PMGR Starters <b>Replaces:</b> <b>Lester:</b> 17870, 17958, 17960 <b>OEM:</b> <b>Dim:</b> Gear OD 29mm, Gear ID 11mm, Tooth Length 18.25mm Gear OAL 34.20mm <b>Ref:</b> <b>Note:</b></p>
 <p><b>54-82146</b> <b>Pinion Gear</b> <b>9T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 29mm, Gear ID 16.7mm, Tooth Length 21.6mm Gear OAL 25mm <b>Ref:</b> 54-82217 <b>Note:</b> Close end. 54-82146 open end.</p>	<p><b>Photo Coming Soon</b></p> <p><b>54-855200</b> <b>Pinion Gear</b> <b>9T, CW 18 Spline</b></p> <p><b>For:</b> Mitsuba SM302 Series OSGR; SM402 Series PMOSGR Starters <b>Replaces:</b> <b>Lester:</b> 16845, 16901, 16902, 16914, 16960, 16975, 17052, 17156, 17160, 17201, 17205, 17474, 17491, 17527 <b>OEM:</b> <b>Dim:</b> Gear OD 29mm, Gear ID mm, Tooth Length mm Gear OAL 41mm <b>Ref:</b> 54-85200, 6291-2960G <b>Note:</b></p>	<p><b>Photo Coming Soon</b></p> <p><b>54-82225</b> <b>Pinion Gear</b> <b>9T, CW, 10 Spline</b></p> <p><b>For:</b> Denso PMGR Starters <b>Replaces:</b> <b>Lester:</b> 19185 <b>OEM:</b> <b>Dim:</b> Gear OD 30.8mm, Gear ID 10.9mm, Tooth Length mm Gear OAL 22.5mm <b>Ref:</b> AIM SZ-0753AX <b>Note:</b></p>

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# 9 Teeth Gear

9 Teeth	9 Teeth	9 Teeth
 <p><b>54-82532</b> <b>Pinion Gear</b> <b>9T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 32mm, Gear ID mm, Tooth Length mm Gear OAL 40mm <b>Ref:</b> <b>Note:</b> Used to replace Denso OSGR unit for 028000-3530.</p>	<p><b>Photo Coming Soon</b></p> <p><b>54-82154</b> <b>Pinion Gear</b> <b>9T, CW, 10 Spline</b></p> <p><b>For:</b> Hitachi OSGR Starters <b>Replaces:</b> <b>Lester:</b> 17088 <b>OEM:</b> <b>Dim:</b> Gear OD 32.5mm, Gear ID mm, Tooth Length mm Gear OAL 87mm <b>Ref:</b> <b>Note:</b> Used in 54-81104 Starter Drive</p>	 <p><b>54-82114</b> <b>Pinion Gear</b> <b>9T, CW, 9 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 33.5mm, Gear ID mm, Tooth Length 7mm Gear OAL 17mm <b>Ref:</b> <b>Note:</b></p>
 <p><b>54-82104</b> <b>Pinion Gear</b> <b>9T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> 028099-3400 <b>Lester:</b> 16739, 16739, 18159, 18159, 18160, 19788, 19906, 19907 <b>OEM:</b> <b>Dim:</b> Gear OD 32.5mm, Gear ID 17.6mm, Tooth Length 15.25mm Gear OAL 25.2mm <b>Ref:</b> <b>Note:</b> Close end.</p>	 <p><b>54-82185</b> <b>Pinion Gear</b> <b>9T, CW/CCW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 33.4mm, Gear ID 17mm, Tooth Length 14mm Gear OAL 23.45mm <b>Ref:</b> AIM SN-07157A <b>Note:</b> Used in 54-81104 Starter Drive</p>	 <p><b>54-82118</b> <b>Pinion Gear</b> <b>9T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 33.5mm, Gear ID 16.8mm, Tooth Length 16.5mm Gear OAL 23.5mm <b>Ref:</b> 54-82220, 6290-2621A <b>Note:</b> Thermo King</p>

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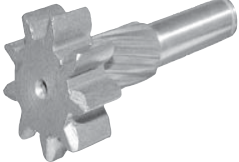





# 9 Teeth Gear

9 Teeth	9 Teeth	9 Teeth
 <p><b>54-82186-1</b> <b>Pinion Gear</b> <b>9T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> 028099-3380, 028099-5740, 028099-5741 <b>Lester:</b> 16650, 16650, 18002, 18144, 18144, 18144, 19554 <b>OEM:</b> <b>Dim:</b> Gear OD 33.6mm, Gear ID 17mm, Tooth Length 16.6mm Gear OAL 23.5mm <b>Ref:</b> 6290-2626A <b>Note:</b> Also see 54-82186. Gear wo/Lip. w/lip use 54-82186.</p>	 <p><b>54-82217</b> <b>Pinion Gear</b> <b>9T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> 028099-5740, 028099-5741 <b>Lester:</b> 16650 (silver), 18002, 18144, 19554 <b>OEM:</b> <b>Dim:</b> Gear OD 34.5mm, Gear ID 17mm, Tooth Length 15.5mm Gear OAL 23.45mm <b>Ref:</b> <b>Note:</b> Similar to 54-82186, but the Gear Length different.</p>	 <p><b>54-82540</b> <b>Pinion Gear</b> <b>9T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> 028099-3210 <b>Lester:</b> 16651, 16922, 16971, 17359, 31299 <b>OEM:</b> <b>Dim:</b> Gear OD 35mm, Gear ID 18.25mm, Tooth Length 17mm Gear OAL 36mm <b>Ref:</b> <b>Note:</b> 54-82211, 6290-2002</p>
 <p><b>54-82533</b> <b>Pinion Gear</b> <b>9T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 34.4mm, Gear ID 17.35mm, Tooth Length 17mm Gear OAL 40mm <b>Ref:</b> <b>Note:</b></p>	 <p><b>54-82219</b> <b>Pinion Gear</b> <b>9T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> 16236, 16248, 16578, 16674 <b>OEM:</b> <b>Dim:</b> Gear OD 35mm, Gear ID 17mm, Tooth Length 12.6mm Gear OAL 23.7mm <b>Ref:</b> <b>Note:</b> Used on HD-0300, HD-0300C Harley Big Dog starter.</p>	 <p><b>54-81121</b> <b>Pinion Gear</b> <b>9T, CW, 10 Spline</b></p> <p><b>For:</b> Hitachi OSGR Starters <b>Replaces:</b> 2114-95001, 2114-95501, 2130-2501 <b>Lester:</b> 16733, 18061, 18490, 30276, 30601, 32117 <b>OEM:</b> <b>Dim:</b> Gear OD 35.5mm, Gear ID mm, Tooth Length 15mm Gear OAL 87.9mm <b>Ref:</b> 54-81206, 6204-2589A <b>Note:</b></p>

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# 9 Teeth Gear

9 Teeth	9 Teeth	9 Teeth
 <p><b>54-82126 Pinion Gear 9T, CW, 10 Spline</b></p> <p><b>For:</b> Hitachi OSGR Starters  <b>Replaces:</b> 2114-95001, 2114-95501, 2130-2501  <b>Lester:</b> 16733, 16733, 18061, 18061, 18490, 18491, 30276, 30601, 30780, 32117, 32117  <b>OEM:</b>  <b>Dim:</b> Gear OD 35.5mm, Gear ID mm, Tooth Length 15mm Gear OAL 87.2mm  <b>Ref:</b> 54-81206, 6204-2589A  <b>Note:</b> Also see:            54-81121 Close end, 9.63mm/15mm Gear Length            54-81125 Close end, 11.56mm/16.6mm Gear Length</p>	 <p><b>54-82117 Pinion Gear 9T, CW/CCW 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters  <b>Replaces:</b>  <b>Lester:</b>  <b>OEM:</b>  <b>Dim:</b> Gear OD 36.4mm, Gear ID 16.9mm, Tooth Length 14mm Gear OAL 23.5mm  <b>Ref:</b>  <b>Note:</b> This Gear no Chamfer can be used on CW or CCW.</p>	 <p><b>Temp Photo</b></p> <p><b>54-855210 Pinion Gear 9T, CW, Spline</b></p> <p><b>For:</b> Mitsubishi PMGR Starters  <b>Replaces:</b>  <b>Lester:</b>  <b>OEM:</b>  <b>Dim:</b> Gear OD mm, Gear ID mm, Tooth Length mm Gear OAL mm  <b>Ref:</b>  <b>Note:</b></p>
<p><b>Photo Coming Soon</b></p> <p><b>54-81125 Pinion Gear 9T, CW, 10 Spline</b></p> <p><b>For:</b> Hitachi OSGR Starters  <b>Replaces:</b> 2114-95001, 2114-95501, 2130-2501  <b>Lester:</b> 16733, 16733, 18061, 18061, 18490, 18491, 30276, 30601, 30780, 32117, 32117  <b>OEM:</b>  <b>Dim:</b> Gear OD 36mm, Gear ID mm, Tooth Length 16.6mm Gear OAL 88.63mm  <b>Ref:</b> 54-81213, 6204-2589A  <b>Note:</b> Also see:            54-82126 Open end            54-81121 9.63mm/15mm Gear Length</p>	 <p><b>54-82153 Pinion Gear 9T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters  <b>Replaces:</b> 028099-5560  <b>Lester:</b> 16657, 17099, 17117, 17117, 18013, 18013, 18013, 18977  <b>OEM:</b>  <b>Dim:</b> Gear OD 43.8mm, Gear ID 17mm, Tooth Length 14.6mm Gear OAL 23.4mm  <b>Ref:</b> 54-82213, 6290-2028  <b>Note:</b> Also see 54-82153-1</p>	

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# 54- Gear

10 Teeth	10 Teeth	10 Teeth
 <p><b>54-82142</b> <b>Pinion Gear</b> <b>10T, CW, 8 Spline</b></p> <p><b>For:</b> Mitsubishi PMGR Starters <b>Replaces:</b> <b>Lester:</b> 17006, 17046, 17564, 17749 <b>OEM:</b> <b>Dim:</b> Gear OD 26.5mm, Gear ID 12mm, Tooth Length 16.5mm Gear OAL 33mm <b>Ref:</b> <b>Note:</b></p>	 <p><b>54-82216</b> <b>Pinion Gear</b> <b>10T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 27.5mm, Gear ID 17mm, Tooth Length 16.5mm Gear OAL 23.5mm <b>Ref:</b> <b>Note:</b></p>	 <p><b>54-82120</b> <b>Pinion Gear</b> <b>10T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> 028099-7950 (Gear Kit) <b>Lester:</b> 17460, 17465, 17735 <b>OEM:</b> <b>Dim:</b> Gear OD 28mm, Gear ID 17mm, Tooth Length 16.35mm Gear OAL 23.4mm <b>Ref:</b> 54-82215, 6290-2614A <b>Note:</b> Used w/ 54-82007 clutch assy. in 54-82703 starter drive same as 54-82120H but from different supplier</p>
 <p><b>54-82232</b> <b>Pinion Gear</b> <b>10T, CW, 0 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 26.8mm, Gear ID 12mm, Tooth Length 18.8mm Gear OAL 32.1mm <b>Ref:</b> <b>Note:</b> Similar dimension as 54-82211, except Pinion 10 Teeth, 26.8mm Gear OD. for High performance starter use. Used with HP51-82102 DE Housing.</p>	 <p><b>54-82233</b> <b>Pinion Gear</b> <b>10T, CW, 10 Spline</b></p> <p><b>For:</b> Denso PLGR/PMGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 27.8mm, Gear ID 11.3mm, Tooth Length 12mm Gear OAL 23.3mm <b>Ref:</b> <b>Note:</b></p>	 <p><b>54-82106</b> <b>Pinion Gear</b> <b>10T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> 028099-6310, 028099-7590, 028300-1811, 028371-6050 <b>Lester:</b> 17466, 19176, 17573, 17084 <b>OEM:</b> <b>Dim:</b> Gear OD 33mm, Gear ID 17.5mm, Tooth Length 16.4mm Gear OAL 25mm <b>Ref:</b> 54-82206, 6290-2613A <b>Note:</b> Used w/ 54-82007 Starter Clutch &amp; 54-82704 Starter Drive</p>


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# 54- Gear

10 Teeth	10 Teeth	10 Teeth
 <p><b>54-82105</b> <b>Pinion Gear</b> <b>10T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> 028371-2550 <b>Lester:</b> 17100, 17119, 17379, 17379A, 17384, 17392, 19911, 19913 <b>OEM:</b> <b>Dim:</b> Gear OD 39mm, Gear ID 16.9mm, Tooth Length 13.5mm Gear OAL 23.5mm <b>Ref:</b> 54-82205, 6290-2005 <b>Note:</b> Also see 54-82105-1, 54-82105-2</p>	 <p><b>54-82105-2</b> <b>Pinion Gear</b> <b>10T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> 028371-2550 <b>Lester:</b> 17100, 17119, 17379, 17379A, 17384, 17392, 19911, 19913 <b>OEM:</b> <b>Dim:</b> Gear OD 39mm, Gear ID 16.9mm, Tooth Length 13.5mm Gear OAL 23.5mm <b>Ref:</b> 54-82205, 6290-2005 <b>Note:</b> Different supplier</p>	 <p><b>54-82555</b> <b>Pinion Gear</b> <b>10T, CW, Spline</b></p> <p><b>For:</b> Denso PLGR PA90 Starters <b>Replaces:</b> 028371-9210 <b>Lester:</b> 16014, 16020, 19334, 19856, 30419, 33321 <b>OEM:</b> 428000-6030, 428000-6901, 428000-7100, 428000-7120, 42800-7140, 428000-7870, 428000-9920 <b>Dim:</b> Gear OD 40mm, Gear ID mm, Tooth Length 18mm Gear OAL mm <b>Ref:</b> 6190-2606 <b>Note:</b></p>
 <p><b>54-82105-1</b> <b>Pinion Gear</b> <b>10T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> 028371-2550 <b>Lester:</b> 17100, 17119, 17379, 17379A, 17384, 17392, 19911, 19913 <b>OEM:</b> <b>Dim:</b> Gear OD 39mm, Gear ID 16.9mm, Tooth Length 13.5mm Gear OAL 23.5mm <b>Ref:</b> 54-82205, 6290-2005 <b>Note:</b> Different supplier</p>	 <p><b>54-82229</b> <b>Pinion Gear</b> <b>10T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 40mm, Gear ID 13.5mm, Tooth Length 16.5mm Gear OAL 23.5mm <b>Ref:</b> <b>Note:</b></p>	 <p><b>54-82522</b> <b>Pinion Gear</b> <b>10T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> 028099-3270 <b>Lester:</b> 16981, 17198, 17199, 17250, 17348, 17380, 17385, 17388, 17388, 17391, 17393, 17399, 17399, 17418, 17418, 17418, 17458, 17609, 17611, 17613, 17614, 17616, 17630, 18007, 18137, 18138, 18342, 18402, 18402, 18406, 18408, 18456, 18505, 18508, 18509, 18510, 18517, 18535, 18548, 18560, 18989, 18996, 18997, 19097, 19104, 19168, 19338, 19514, 19515, 19614, 19790, 19805, 19806, 19817, 19846, 19857, 19873, 19962, 19963, 19994, 32957 <b>OEM:</b> <b>Dim:</b> Gear OD 40.6mm, Gear ID 18.25mm, Tooth Length 16.9mm Gear OAL 36mm <b>Ref:</b> 54-82209, 6290-2001 <b>Note:</b></p>

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# 54- Gear

11 Teeth	11 Teeth	11 Teeth
 <p><b>54-82121</b> <b>Pinion Gear</b> <b>11T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 29.2mm, Gear ID 16.7mm, Tooth Length 12.2mm Gear OAL 23.5mm <b>Ref:</b> <b>Note:</b></p>	 <p><b>54-82103</b> <b>Pinion Gear</b> <b>11T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> 028099-6260, 028099-6300, 028371-5390 <b>Lester:</b> 16650, 16676, 16849, 17007, 17020, 17083, 17091, 17129, 17197, 17216, 17314, 17363, 17368, 17570, 17579, 18154, 18275, 17083, 17091, 17129, 17579, 17880, 18273, 18274, 18995, 19093, 19094, 19333, 19914, 19915, 19916 <b>OEM:</b> <b>Dim:</b> Gear OD 29.5mm, Gear ID 17.2mm, Tooth Length 16.6mm Gear OAL 25.5mm <b>Ref:</b> 54-82203, 6290-2011 <b>Note:</b> Also see 54-82103-1</p>	 <p><b>54-82523</b> <b>Pinion Gear</b> <b>11T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> 028099-3250 (Gear Kit), 028099- 5490 (Drive Kit) <b>Lester:</b> 17377 <b>OEM:</b> <b>Dim:</b> Gear OD 34mm, Gear ID 17.4mm, Tooth Length 18.6mm Gear OAL 40mm <b>Ref:</b> <b>Note:</b></p>
 <p><b>54-82224</b> <b>Pinion Gear</b> <b>11T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> 16000 <b>OEM:</b> 228000-7060, 228000-7061, 438000- 1300 <b>Dim:</b> Gear OD 29.4mm, Gear ID 17mm, Tooth Length 16.5mm Gear OAL 23.5mm <b>Ref:</b> <b>Note:</b> For Post Office starter</p>	 <p><b>54-82159</b> <b>Pinion Gear</b> <b>11T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> 17549, 17574 <b>OEM:</b> <b>Dim:</b> Gear OD 33.85mm, Gear ID 17mm, Tooth Length 13.6mm Gear OAL 23.5mm <b>Ref:</b> 54-82219, 6290-2619A <b>Note:</b> used on 54-82011 Clutch Assembly</p>	 <p><b>54-82524</b> <b>Pinion Gear</b> <b>11T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> 028099-6200 <b>Lester:</b> 17362 <b>OEM:</b> <b>Dim:</b> Gear OD 34.25mm, Gear ID 17.5mm, Tooth Length 17mm Gear OAL 40mm <b>Ref:</b> 54-82210, 6290-2004 <b>Note:</b></p>

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# 54- Gear

11 Teeth	11 Teeth	11 Teeth
 <p><b>54-82132</b> <b>Pinion Gear</b> <b>11T, CW, Spline</b></p> <p><b>For:</b> Mitsubishi PLGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 34.3mm, Gear ID 12.8mm, Tooth Length 14.2mm Gear OAL 28mm <b>Ref:</b> AIM SM-0724A <b>Note:</b></p>	 <p><b>Temp Photo</b></p> <p><b>54-82527</b> <b>Pinion Gear</b> <b>11T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> 128099-5250 (Gear Kit) <b>Lester:</b> 19747, 19924 <b>OEM:</b> <b>Dim:</b> Gear OD 38.5mm, Gear ID mm, Tooth Length mm Gear OAL 36mm <b>Ref:</b> <b>Note:</b></p>	 <p><b>54-82553</b> <b>Pinion Gear</b> <b>11T, CW, 16 Spline</b></p> <p><b>For:</b> Denso PLGR PA90 Starters <b>Replaces:</b> 028371-9050 <b>Lester:</b> 19120, 19335, 19336, 19808 <b>OEM:</b> 428000-512, 428000-523, 428000-531, 428000-698 <b>Dim:</b> Gear OD 39.8mm, Gear ID 16.4mm, Tooth Length 18mm Gear OAL 19.8mm <b>Ref:</b> <b>Note:</b></p>
 <p><b>54-82119</b> <b>Pinion Gear</b> <b>11T, CW/CCW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR 2.0kw Starters <b>Replaces:</b> <b>Lester:</b> 30678 <b>OEM:</b> 128000-1180, 128000-1181 <b>Dim:</b> Gear OD 34.4mm, Gear ID 11.65mm, Tooth Length 10.7mm Gear OAL 23.5mm <b>Ref:</b> <b>Note:</b></p>	 <p><b>54-82535</b> <b>Pinion Gear</b> <b>11T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> 028099-3240 <b>Lester:</b> 16882 <b>OEM:</b> 028000-6210, 028000-8630 <b>Dim:</b> Gear OD 39.4mm, Gear ID 18.2mm, Tooth Length 17mm Gear OAL 39.5mm <b>Ref:</b> <b>Note:</b></p>	 <p><b>54-82556</b> <b>Pinion Gear</b> <b>11T, CCW, Spline</b></p> <p><b>For:</b> Denso PLGR PA90 Starters <b>Replaces:</b> <b>Lester:</b> 19201 <b>OEM:</b> 428000-5860, 428000-5861, 428000-5862, 428080-5863 <b>Dim:</b> Gear OD 39.8mm, Gear ID mm, Tooth Length mm Gear OAL mm <b>Ref:</b> <b>Note:</b></p>


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# 54- Gear

11 Teeth	11 Teeth	11 Teeth
 <p><b>54-82226 Pinion Gear 11T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters  <b>Replaces:</b>  <b>Lester:</b>  <b>OEM:</b>  <b>Dim:</b> Gear OD 40mm,  Gear ID 13.5mm, Tooth Length 14.7mm  Gear OAL 23.5mm  <b>Ref:</b>  <b>Note:</b></p>	 <p><b>54-82558 Pinion Gear 11T, CCW, Spline</b></p> <p><b>For:</b> Denso PLGR PA90 Starters  <b>Replaces:</b>  <b>Lester:</b> 30691  <b>OEM:</b> 428000-5930, 428000-5931, 428000-5932  <b>Dim:</b> Gear OD 40.3mm,  Gear ID mm, Tooth Length 17mm  Gear OAL 21.35mm  <b>Ref:</b>  <b>Note:</b></p>	 <p><b>54-82227 Pinion Gear 11T, CW, 9 Spline</b></p> <p><b>For:</b> Denso OSGR Starters  <b>Replaces:</b>  <b>Lester:</b>  <b>OEM:</b>  <b>Dim:</b> Gear OD 41.3mm,  Gear ID 15.4mm, Tooth Length 11.3mm  Gear OAL 17.1mm  <b>Ref:</b>  <b>Note:</b></p>
 <p><b>54-82525 Pinion Gear 11T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters  <b>Replaces:</b> 028099-3310, 028099-5460  <b>Lester:</b> 16897, 17283, 17462, 18136,  18151, 18181, 18454, 18455, 18457, 18458,  18568, 18569, 19851, 19853, 19904, 30721,  31349, 31376, 33217, 34013  <b>OEM:</b>  <b>Dim:</b> Gear OD 40mm,  Gear ID 18.5mm, Tooth Length 17mm  Gear OAL 36mm  <b>Ref:</b>  <b>Note:</b> Also see 54-82525-1</p>	 <p><b>54-82167 Pinion Gear 11T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters  <b>Replaces:</b> 028099-559, 028099-5590,  028099-655, 028099-6550; 028371-1980  <b>Lester:</b> 16468, 16946, 16946, 17115, 17612,  17619, 18142, 18175, 19648  <b>OEM:</b> 428000-5930, 428000-5931, 428000-5932  <b>Dim:</b> Gear OD 40.6mm,  Gear ID 17mm, Tooth Length 14mm  Gear OAL 23.5mm  <b>Ref:</b> 54-82214, 6290-2026  <b>Note:</b> Also see 54-82167-1.</p>	 <p><b>Temp Photo</b></p> <p><b>54-82528 Pinion Gear 11T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters  <b>Replaces:</b> 028099-3300, 028300-1730  <b>Lester:</b> 19746  <b>OEM:</b>  <b>Dim:</b> Gear OD 41.5mm,  Gear ID 15.4mm, Tooth Length mm  Gear OAL 40mm  <b>Ref:</b> 54-82221, 6290-2044  <b>Note:</b></p>

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# 54- Gear

11 Teeth	11 Teeth	11 Teeth
 <p data-bbox="193 725 403 813"><b>54-12017</b> <b>Pinion Gear</b> <b>11T, CW, 23 Spline</b></p> <p data-bbox="86 815 467 1043"><b>For:</b> Delco PLGR 39MT Starters <b>Replaces:</b> 10511753 <b>Lester:</b> 6812, 6827, 6829 <b>OEM:</b> <b>Dim:</b> Gear OD 56mm, Gear ID 16.4mm, Tooth Length 23.7mm Gear OAL 26mm <b>Ref:</b> 54-1217, 6240-700G <b>Note:</b></p>		

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# 54- Gear

12 Teeth	12 Teeth	12 Teeth
<p style="text-align: center;"><b>Photo Coming Soon</b></p> <p style="text-align: center;"><b>54-82147 Pinion Gear 12T, CW, Spline</b></p> <p><b>For:</b> Mitsubishi PLGR/OSGR Starters <b>Replaces:</b> M605X94171 <b>Lester:</b> 17577, 17578, 18971 <b>OEM:</b> <b>Dim:</b> Gear OD 29mm, Gear ID 16.7mm, Tooth Length 18mm Gear OAL 25mm <b>Ref:</b> 54-83128 (Gaer kit), 6203-2102 (Gear Kit) <b>Note:</b></p>	 <p style="text-align: center;"><b>54-82130 Pinion Gear 12T, CW, 20 Spline</b></p> <p><b>For:</b> Mitsubishi OSGR Starters <b>Replaces:</b> M605X65771 <b>Lester:</b> 16744, 16799 <b>OEM:</b> <b>Dim:</b> Gear OD 37mm, Gear ID 19.6mm, Tooth Length 16.6mm Gear OAL 17.9mm <b>Ref:</b> 54-83207, 6203-2119 <b>Note:</b></p>	 <p style="text-align: center;"><b>54-12016 Pinion Gear 12T, CW, 20 Spline</b></p> <p><b>For:</b> Delco 39MT PLGR Starters <b>Replaces:</b> 10511918 <b>Lester:</b> 6828, 6854, 6855 <b>OEM:</b> <b>Dim:</b> Gear OD 42.6mm, Gear ID 16.4mm, Tooth Length 23.5mm Gear OAL 26mm <b>Ref:</b> 54-1216, 6240-701G <b>Note:</b></p>
 <p style="text-align: center;"><b>54-22000 Pinion Gear 12T, CW, 18 Spline</b></p> <p><b>For:</b> Ford PMGR Noseless Starters <b>Replaces:</b> F81U-11363-AA <b>Lester:</b> 6646, 6658 <b>OEM:</b> <b>Dim:</b> Gear OD 32.1mm, Gear ID 13.9mm, Tooth Length mm Gear OAL 15mm <b>Ref:</b> 54-2200, 6250-5000 <b>Note:</b></p>	 <p style="text-align: center;"><b>54-82534 Pinion Gear 12T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> M <b>Lester:</b> 1 <b>OEM:</b> <b>Dim:</b> Gear OD 37mm, Gear ID mm, Tooth Length mm Gear OAL 35.5mm <b>Ref:</b> <b>Note:</b> Used on Metro unit# HD-0205, IMI25010-001.</p>	 <p style="text-align: center;"><b>Temp Photo</b></p> <p style="text-align: center;"><b>54-82526 Pinion Gear 12T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 43.5mm, Gear ID mm, Tooth Length mm Gear OAL 36mm <b>Ref:</b> <b>Note:</b></p>


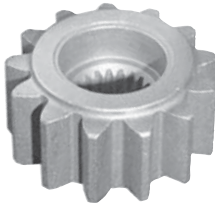

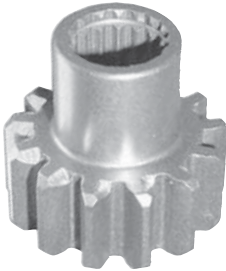


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# 54- Gear

12 Teeth	12 Teeth	12 Teeth
 <p><b>54-82520</b> <b>Pinion Gear</b> <b>12T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> 128099-5400 (Gear Kit) <b>Lester:</b> 18197, 18424, 18424, 32893 <b>OEM:</b> <b>Dim:</b> Gear OD 44.8mm, Gear ID 18.7mm, Tooth Length 16.5mm Gear OAL 35.9mm <b>Ref:</b> 6290-2027 (Gear Kit) <b>Note:</b></p>	 <p><b>54-82557</b> <b>Pinion Gear</b> <b>12T, CW, 16 Spline</b></p> <p><b>For:</b> Denso PA90 PLGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 44.9mm, Gear ID mm, Tooth Length 16mm Gear OAL 19.8mm <b>Ref:</b> <b>Note:</b></p>	
 <p><b>54-12018</b> <b>Pinion Gear</b> <b>12T, CW, 23 Spline</b></p> <p><b>For:</b> Delco 38MT/39MT PLGR Starters <b>Replaces:</b> 10511838 <b>Lester:</b> 6816, 6820, 6821, 6836 <b>OEM:</b> <b>Dim:</b> Gear OD 44.9mm, Gear ID 16.4mm, Tooth Length 16.5mm Gear OAL 35.9mm <b>Ref:</b> 54-1218, 6240-702G <b>Note:</b></p>		

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# 54- Gear

13 Teeth	13 Teeth	13 Teeth
 <p><b>54-82552</b> <b>Armature Gear</b> <b>13T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> 028371-3200 <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 24.5mm, Gear ID 13.19mm, Tooth Length 17.9mm Gear OAL 17.9mm <b>Ref:</b> <b>Note:</b></p>	 <p><b>54-82129</b> <b>Pinion Gear</b> <b>13T, CW, 20 Spline</b></p> <p><b>For:</b> Mitsubishi OSGR Starters <b>Replaces:</b> M605X62871 <b>Lester:</b> 16744, 16799 <b>OEM:</b> <b>Dim:</b> Gear OD 39.5mm, Gear ID 19.6mm, Tooth Length 16.5mm Gear OAL 18.5mm <b>Ref:</b> 54-83202, 6203-2131 <b>Note:</b> Used w/ 54-82138 clutch assy.</p>	 <p><b>54-82554</b> <b>Pinion Gear</b> <b>13T, CW, 16 Spline</b></p> <p><b>For:</b> Denso PA90 PLGR Starters <b>Replaces:</b> 028371-8810 <b>Lester:</b> 19029, 19183 <b>OEM:</b> <b>Dim:</b> Gear OD 39.8mm, Gear ID 16.65mm, Tooth Length 17mm Gear OAL 19.8mm <b>Ref:</b> AIM SZ-07116A, J&amp;N 222-52044 <b>Note:</b></p>
 <p><b>54-82521</b> <b>Pinion Gear</b> <b>13T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> 028099-3230 <b>Lester:</b> 16990, 17390, 17394, 17548, 17600, 17802, 17818, 18506, 18559, 18936, 19618 <b>OEM:</b> <b>Dim:</b> Gear OD 39.4mm, Gear ID 18.4mm, Tooth Length 17mm Gear OAL 36mm <b>Ref:</b> 54-82202, 6290-2056 <b>Note:</b> Used on 54-8227 Drive. This is 13 Tooth, for 11 Tooth use 54-82525.</p>	 <p><b>54-82131</b> <b>Pinion Gear</b> <b>13T, CW, 20 Spline</b></p> <p><b>For:</b> Mitsubishi OSGR Starters <b>Replaces:</b> M605X66071 <b>Lester:</b> 16854, 16854, 17036, 17096, 30897, 33035, 33035 <b>OEM:</b> <b>Dim:</b> Gear OD 39.5mm, Gear ID 19.7mm, Tooth Length 11.75mm Gear OAL 18.5mm <b>Ref:</b> 54-83200, 6203-2130 <b>Note:</b> Similar to 54-82129 but 54-82129 has 16.5mm Tooth Length</p>	 <p><b>54-82544</b> <b>Pinion Gear</b> <b>13T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> 128099-5340 <b>Lester:</b> 17362A <b>OEM:</b> <b>Dim:</b> Gear OD 40mm, Gear ID 19.8mm, Tooth Length 17mm Gear OAL 40mm <b>Ref:</b> J&amp;N 222-52031, 6290-2021 <b>Note:</b> For Lester 17362, please use 54- 82524</p>

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# 54- Gear

13 Teeth	13 Teeth	13 Teeth
 <p style="text-align: center;"><b>54-82107</b> <b>Pinion Gear</b> <b>13T, CCW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> 028371-5653 <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 40.5mm, Gear ID 17.25mm, Tooth Length 16.2mm Gear OAL 23.5mm <b>Ref:</b> 54-82207, 6290-2020 <b>Note:</b> also see 54-82107-2. Close end. Open End use 54-82107-1</p>	 <p style="text-align: center;"><b>54-82139</b> <b>Pinion Gear</b> <b>13T, CCW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> 028371-6490, 028371-6780, 028371-6960 <b>Lester:</b> 16893, 17263, 17263, 17263, 17263, 17534, 17534, 17687, 17715, 17716, 17774, 17777 <b>OEM:</b> <b>Dim:</b> Gear OD 40.5mm, Gear ID 17mm, Tooth Length 17.9mm Gear OAL 23.5mm <b>Ref:</b> 54-82216, 6290-2059 <b>Note:</b></p>	 <p style="text-align: center;"><b>54-82230</b> <b>Pinion Gear</b> <b>13T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 46.2mm, Gear ID 13.5mm, Tooth Length 12.2mm Gear OAL 23.5mm <b>Ref:</b> <b>Note:</b></p>
 <p style="text-align: center;"><b>54-82107-2</b> <b>Pinion Gear</b> <b>13T, CCW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Starters <b>Replaces:</b> 028371-5653 <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 40.5mm, Gear ID 17.3mm, Tooth Length 17.8mm Gear OAL 23.5mm <b>Ref:</b> 54-82207, 6290-2020 <b>Note:</b> Open end. Close End use 54-82107 Used w/ 54-82712 Starter Drive</p>	 <p style="text-align: center;"><b>54-82529</b> <b>Pinion Gear</b> <b>13T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 45.5mm, Gear ID mm, Tooth Length mm Gear OAL 36mm <b>Ref:</b> <b>Note:</b></p>	 <p style="text-align: center;"><b>54-82530</b> <b>Pinion Gear</b> <b>13T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 46.4mm, Gear ID mm, Tooth Length 17mm Gear OAL 36mm <b>Ref:</b> <b>Note:</b> used on PIC# 190-6075</p>

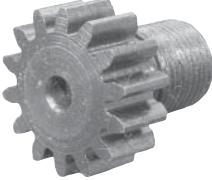

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## 54- Gear

13 Teeth	13 Teeth	13 Teeth
 <p data-bbox="199 689 400 779"><b>54-82228</b> <b>Pinion Gear</b> <b>13T, CW, 9 Spline</b></p> <p data-bbox="89 781 451 1010"><b>For:</b> Denso OSGR Starters <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 46.5mm, Gear ID 15.5mm, Tooth Length 12mm Gear OAL 17mm <b>Ref:</b> <b>Note:</b></p>		






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# 54- Gear

14 Teeth	14 Teeth	14 Teeth
 <p><b>54-12602</b> <b>Pinion Gear - Tach Drive</b> <b>14T, Straight, Spline</b></p> <p><b>For:</b> Delco 10DN Alternator <b>Replaces:</b> <b>Lester:</b> 7116, 7118 <b>OEM:</b> <b>Dim:</b> Gear OD 17mm, Gear ID mm, Tooth Length 7mm Gear OAL 18.30mm <b>Ref:</b> 46-1197 (Kit), 9940-3000 <b>Note:</b> used w/ 54-12601 Tach Drive</p>  <p><b>54-82215</b> <b>Idle Gear</b> <b>14T, Straight, 21 Spline</b></p> <p><b>For:</b> Delco OSGR Starters - Waffle Type <b>Replaces:</b> 028371-2360 <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 21mm, Gear ID 9.44mm, Tooth Length 14mm Gear OAL 14mm <b>Ref:</b> <b>Note:</b></p>		


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## 54- Gear

15 Teeth	15 Teeth	15 Teeth
 <p><b>54-82531</b> <b>Pinion Gear</b> <b>15T, CW, 16 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starter <b>Replaces:</b> 028099-3220 <b>Lester:</b> 16656 <b>OEM:</b> <b>Dim:</b> Gear OD 43.6mm, Gear ID 18.6mm, Tooth Length 12mm Gear OD 40mm <b>Ref:</b> 54-82222, 6290-2622A <b>Note:</b></p>	 <p><b>54-82124</b> <b>Pinion Gear</b> <b>15T, CW, 18 Spline</b></p> <p><b>For:</b> Mitsubishi OSGR Starter <b>Replaces:</b> M605X61671 <b>Lester:</b> 17097, 17141 <b>OEM:</b> <b>Dim:</b> Gear OD 45mm, Gear ID 15.6mm, Tooth Length 15.2mm Gear OD 19mm <b>Ref:</b> 54-83213, 6203-2140 <b>Note:</b></p>	 <p><b>76-82227</b> <b>Planetary Gear</b> <b>15T</b></p> <p><b>For:</b> Denso PLGR Starter <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 21.6mm, Gear ID 6mm, Tooth Length 7.4mm Gear OD 7.4mm <b>Ref:</b> <b>Note:</b></p>
 <p><b>54-82153</b> <b>Pinion Gear</b> <b>15T, CW, 18 Spline</b></p> <p><b>For:</b> Denso OSGR Heavy Duty Starter <b>Replaces:</b> 028099-5560 <b>Lester:</b> 16657, 17099, 17117, 17117, 18013, 18013, 18013, 18977 <b>OEM:</b> <b>Dim:</b> Gear OD 43.8mm, Gear ID 17mm, Tooth Length 14.6mm Gear OD 23.4mm <b>Ref:</b> 54-82213, 6290-2028 <b>Note:</b> also see 54-82153-1</p>	 <p><b>76-82523</b> <b>Planetary Gear</b> <b>15T</b></p> <p><b>For:</b> Denso PA90 PLGR Starter <b>Replaces:</b> 028630-5180 <b>Lester:</b> 19201, 19334, 19336, 19856, 33321 <b>OEM:</b> <b>Dim:</b> Gear OD 25.5mm, Gear ID 8mm, Tooth Length 12.5mm Gear OD 12.5mm <b>Ref:</b> AIM SZ-003116G <b>Note:</b></p>	

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# 54- Gear

16 Teeth	16 Teeth	16 Teeth
 <p><b>76-8005</b> <b>Planetary Gear</b> <b>16T</b></p> <p><b>For:</b> Mitsuba PMGR Starter <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 18.5mm, Gear ID mm, Tooth Length mm Gear OD mm <b>Ref:</b> 76-85100, SH-31114G <b>Note:</b></p>		

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## 54- Gear

17 Teeth

17 Teeth

17 Teeth



**54-82198**  
**Pinion Gear**  
**17T, CCW, 18 Spline**

**For:** Denso OSGR Starter

**Replaces:**

**Lester:**


**OEM:**

**Dim:** Gear OD 39mm,  
Gear ID 17mm, Tooth Length 15mm  
Gear OD 22.6mm

**Ref:**


**Note:** used on Denso OSGR 18423R-ND  
replace unit.

# 54- Gear

19 Teeth	19 Teeth	19 Teeth
 <p><b>54-855209</b> <b>Pinion Gear Set</b> <b>19T, CCW, Spline</b></p> <p><b>For:</b> Mitsuba PMOSGR Starter <b>Replaces:</b> <b>Lester:</b> 19252 <b>OEM:</b> <b>Dim:</b> Gear OD 54.65mm, Gear ID 14.1mm, Tooth Length mm Gear OD 28.1mm <b>Ref:</b> <b>Note:</b> with Drive Shaft</p>		

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# 54- Gear

21 Teeth	21 Teeth	21 Teeth
 <p><b>54-82127</b> <b>Pinion Gear</b> <b>21T, CCW, 10 Spline</b></p> <p><b>For:</b> Hitachi OSGR Starter <b>Replaces:</b> 2114-15509, 2114-35014, 2114-55013 <b>Lester:</b> 16806, 16807, 17069, 17145 <b>OEM:</b> <b>Dim:</b> Gear OD 59.8mm, Gear ID mm, Tooth Length 12.2mm Gear OD 78.2mm <b>Ref:</b> 54-81207, 6204-2545G <b>Note:</b> Used on Drive 54-81110</p>		

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# 54- Gear

25 Teeth

25 Teeth

25 Teeth



**54-82128**  
**Pinion Gear**  
**25T, CCW, 10 Spline**

**For:** Hitachi OSGR Starter

**Replaces:**

**Lester:** 16814, 16732

**OEM:**

**Dim:** Gear OD 70mm,

Gear ID mm, Tooth Length 11.9mm

Gear OD 76.4mm

**Ref:** 54-81208, 6204-2814G

**Note:**

# 54- Gear

26 Teeth	26 Teeth	26 Teeth
<div data-bbox="193 421 459 658" data-label="Image"> </div> <div data-bbox="129 763 467 853" data-label="Caption"> <p><b>54-82155</b>  <b>Idle Gear (Intermediate Gear)</b>  <b>26T, Straight, Spline</b></p> </div> <div data-bbox="86 853 467 929" data-label="Text"> <p><b>For:</b> Denso OSGR 1.0kw, 1.4kw, 2.0kw  <b>Replaces:</b> 028371-1220, 028371-1420, 028371-3251</p> </div> <div data-bbox="86 929 515 1364" data-label="Text"> <p><b>Lester:</b> 16248, 16251, 16578, 16578, 16586, 16586, 16600, 16600, 16612, 16676, 16696, 16696, 16696, 16730, 16730, 16736, 16737, 16760, 16761, 16786, 16786, 16790, 16790, 16821, 16823, 16825, 16826, 16827, 16828, 16829, 16833, 16833, 16834, 16839, 16844, 16878, 16884, 16890, 16892, 16893, 16895, 16905, 16905, 16906, 16913, 16913, 16978, 17007, 17020, 17083, 17084, 17084, 17084, 17091, 17125, 17129, 17171, 17189, 17251, 17254, 17260, 17261, 17264, 17352, 17366, 17420, 17421, 17421, 17483, 17494, 17495, 17520, 17521, 17523, 17523, 17525, 17617, 17666, 17681, 17682, 18179, 18182, 18186, 18905, 18905C, 30752, 31181, 31312, 31328, 31329, 31331, 31343, 31350, 31361, 32213, 32214, 32285, 33233</p> </div> <div data-bbox="86 1364 507 1516" data-label="Text"> <p><b>OEM:</b>  <b>Dim:</b> Gear OD 35mm,  Gear ID 22mm, Tooth Length 13.86mm  Gear OD 13.86mm  <b>Ref:</b> MEGR-01, J&amp;N 222-52008, 6990-1011  <b>Note:</b></p> </div>	<div data-bbox="651 421 901 658" data-label="Image"> </div> <div data-bbox="579 768 917 857" data-label="Caption"> <p><b>54-82141</b>  <b>Idle Gear (Intermediate Gear)</b>  <b>26T, Straight, Spline</b></p> </div> <div data-bbox="534 857 917 934" data-label="Text"> <p><b>For:</b> Denso OSGR 1.0kw, 1.4kw, 2.0kw  <b>Replaces:</b> 028371-6380, 028371-6620, 028371-7190</p> </div> <div data-bbox="534 934 963 1471" data-label="Text"> <p><b>Lester:</b> 10872, 16790, 16831, 17020, 17170, 17197, 17197, 17202, 17204, 17204, 17216, 17240, 17242, 17259, 17259, 17263, 17263, 17263, 17273, 17285, 17423, 17460, 17464, 17465, 17466, 17481, 17485, 17493, 17516, 17517, 17519, 17519, 17524, 17526, 17526, 17529, 17531, 17532, 17533, 17534, 17534, 17535, 17536, 17546, 17546, 17562, 17570, 17571, 17573, 17584, 17629, 17632, 17665, 17668, 17668, 17671, 17676, 17687, 17697, 17706, 17714, 17715, 17716, 17727, 17737, 17747, 17748, 17748, 17774, 17777, 17784, 17784, 17785, 17791, 17791, 17800, 17808, 17823, 17823, 17851, 17880, 17884, 17885, 17893, 17912, 17951, 18004, 18013, 18013, 18014, 18139, 18140, 18142, 18144, 18145, 18148, 18158, 18159, 18160, 18198, 18199, 18400, 18400, 18410, 18410, 18411, 18419, 18556, 18629, 18988, 19187, 19508, 19648, 19807, 19816, 19907, 19913, 30564, 30772, 32351, 33289</p> </div> <div data-bbox="534 1471 917 1624" data-label="Text"> <p><b>OEM:</b>  <b>Dim:</b> Gear OD 35.9mm,  Gear ID 22mm, Tooth Length 11.9mm  Gear OD 11.9mm  <b>Ref:</b> 76-82825-1, 6690-9608  <b>Note:</b> used on light duty OSGR starters</p> </div>	



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# 54- Gear

27 Teeth	27 Teeth	27 Teeth
 <p><b>54-82201</b> <b>Idle Gear (Intermediate Gear)</b> <b>27T, Straight, Spline</b></p> <p><b>For:</b> Denso OSGR Starter <b>Replaces:</b> <b>Lester:</b> <b>OEM:</b> <b>Dim:</b> Gear OD 44.65mm, Gear ID 22mm, Tooth Length 14mm Gear OD 14mm <b>Ref:</b> <b>Note:</b></p>		

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# 54- Gear

31 Teeth	31 Teeth	31 Teeth
 <p data-bbox="132 712 466 797"> <b>54-82551</b>  <b>Idle Gear (Intermediate Gear)</b>  <b>31T, Straight, Spline</b> </p> <p data-bbox="89 801 515 1079"> <b>For:</b> Denso OSGR 2.5kw Heavy Duty Starter  <b>Replaces:</b> 028371-1500  <b>Lester:</b> 16656, 17198, 17311, 17418, 18197, 18402, 18424, 18505, 18559, 18936, 19104, 19514, 19614, 32957, 32958, 33287  <b>OEM:</b>  <b>Dim:</b> Gear OD 49.5mm,            Gear ID 33mm, Tooth Length 17.4mm            Gear OD 17.4mm  <b>Ref:</b> 6690-1013  <b>Note:</b> </p>		
 <p data-bbox="132 1624 466 1709"> <b>54-82301</b>  <b>Idle Gear (Intermediate Gear)</b>  <b>31T, Straight, Spline</b> </p> <p data-bbox="89 1713 515 1937"> <b>For:</b> Denso OSGR 3.0kw Heavy Duty Starter  <b>Replaces:</b> 028371-321  <b>Lester:</b> 17215, 18564, 19966 ... many  <b>OEM:</b>  <b>Dim:</b> Gear OD 50.5mm,            Gear ID 32.2mm, Tooth Length 17.3mm            Gear OD 17.3mm  <b>Ref:</b>  <b>Note:</b> </p>		

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## 54- Gear

33 Teeth

33 Teeth

33 Teeth



**54-82302**

**Idle Gear (Intermediate Gear)  
33T, Straight, Spline**

**For:** Denso OSGR R5 Heavy Duty Starter

**Replaces:** 028371-8850

**Lester:** 19501, 19502, 19503, 19505,  
19506, 19851, 19852, 19994

**OEM:**

**Dim:** Gear OD 53.9mm,  
Gear ID 30mm, Tooth Length 17.3mm  
Gear OD 17.3mm

**Ref:**

**Note:**



## 54- Gear

Special Gear	Special Gear	Special Gear
<div data-bbox="189 389 418 658" data-label="Image"> </div> <div data-bbox="169 703 429 792" data-label="Caption"> <p><b>HP54-91002</b>  <b>Pinion Gear</b>  <b>14T/18T, CCW, Spline</b></p> </div> <div data-bbox="84 792 341 819" data-label="Text"> <p><b>For:</b> Bosch PMGR Starter</p> </div> <div data-bbox="84 819 194 846" data-label="Text"> <p><b>Replaces:</b></p> </div> <div data-bbox="84 846 165 873" data-label="Text"> <p><b>Lester:</b></p> </div> <div data-bbox="84 873 150 898" data-label="Text"> <p><b>OEM:</b></p> </div> <div data-bbox="84 898 140 922" data-label="Text"> <p><b>Dim:</b></p> </div> <div data-bbox="84 922 181 949" data-label="Text"> <p>Top Gear</p> </div> <div data-bbox="84 949 191 976" data-label="Text"> <p>14T, CCW</p> </div> <div data-bbox="84 976 341 1001" data-label="Text"> <p>35mm Gear OD, 12mm ID</p> </div> <div data-bbox="84 1001 252 1025" data-label="Text"> <p>11.65mm Gear L</p> </div> <div data-bbox="84 1050 215 1075" data-label="Text"> <p>Bottom Gear</p> </div> <div data-bbox="84 1075 268 1102" data-label="Text"> <p>18T, Straight Gear</p> </div> <div data-bbox="84 1102 341 1128" data-label="Text"> <p>41mm Gear OD, 12mm ID</p> </div> <div data-bbox="84 1128 225 1153" data-label="Text"> <p>12mm Gear L</p> </div> <div data-bbox="84 1178 220 1205" data-label="Text"> <p>34.2mm OAL</p> </div> <div data-bbox="84 1205 137 1229" data-label="Text"> <p><b>Ref:</b></p> </div> <div data-bbox="84 1229 150 1254" data-label="Text"> <p><b>Note:</b></p> </div> <div data-bbox="84 1254 515 1332" data-label="Text"> <p>- This is a special custom design, outside Gear for Bosch starter Drive, used on Chevy and Ford engines.</p> </div> <div data-bbox="84 1332 448 1357" data-label="Text"> <p>- Work with HP54-91001 Clutch Gear</p> </div> <div data-bbox="129 1366 277 1559" data-label="Image"> </div> <div data-bbox="316 1518 445 1545" data-label="Caption"> <p>HP54-91001</p> </div>		

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