



<b>Fault</b>	<b>Recommendation</b>
1. Short shot, record groove effect	<ol style="list-style-type: none"> <li>1. Adjust feed to minimum consistent cushion</li> <li>2. Increase injection pressure</li> <li>3. Increase injection speed</li> <li>4. Increase back pressure</li> <li>5. Increase barrel temperatures</li> <li>6. Increase mould temperature, particularly for very thin large area parts</li> <li>7. Check non-return valve</li> <li>8. Improve venting</li> <li>9. Enlarge gates, sprue diameters and runners.</li> </ol>
2. Weld line	<ol style="list-style-type: none"> <li>1. Increase mould temperature</li> <li>2. Increase injection speed</li> <li>3. Increase melt temperature</li> <li>4. Increase hold on pressure</li> <li>5. Check venting</li> <li>6. Relocate gate to change flow pattern</li> </ol>
3. Sink marks	<ol style="list-style-type: none"> <li>1. Increase injection pressure</li> <li>2. Optimise holding pressure time</li> <li>3. Reduce screw speed</li> <li>4. Reduce nozzle and metering zone temperatures</li> <li>5. Increase feed zone temperature</li> <li>6. Adjust back pressure</li> <li>7. Increase mould temperature</li> <li>8. Enlarge gates and runners</li> </ol>
4. Burnt streaks (brown)	<ol style="list-style-type: none"> <li>1. Increase back pressure</li> <li>2. Decrease screw speed</li> <li>3. Increase cylinder temperature</li> <li>4. Use machine with larger barrel shot size</li> </ol>
5. Moisture streaks	<ol style="list-style-type: none"> <li>1. Sufficiently pre-dry material, check manufacturers guidelines</li> <li>2. Check packaging</li> <li>3. Check storage of material</li> <li>4. If possible, feed directly from the dryer in a closed system</li> <li>5. Increase back pressure</li> </ol>



<b>Fault</b>	<b>Recommendation</b>
6. Cold slug	<ol style="list-style-type: none"> <li>1. Increase nozzle temperature</li> <li>2. Reduce injection speed</li> <li>3. Create cold slug well in the mould opposite sprue bush</li> </ol>
7. Tails & Hooks especially near raised engraving etc.	<ol style="list-style-type: none"> <li>1. Reduce injection speed</li> <li>2. Increase injection pressure</li> <li>3. Increase mould temperature</li> <li>4. Avoid sharp transitions, reduce engraving depth</li> <li>5. Relocate gate</li> </ol>
8. Glass fibre streaks	<ol style="list-style-type: none"> <li>1. Increase injection time</li> <li>2. Increase mould wall temperature</li> <li>3. Increase melt temperature</li> <li>4. Optimise hold pressure time</li> <li>5. Increase hold pressure</li> </ol>
9. Jetting	<ol style="list-style-type: none"> <li>1. Reduce injection speed or injection profile (slow – fast)</li> <li>2. Increase melt temperature</li> <li>3. Impinge gate onto mould wall/surface</li> <li>4. Smooth transition gate to moulded part</li> <li>5. Increase gate diameter</li> <li>6. Relocate gate</li> </ol>
10. Diesel effect	<ol style="list-style-type: none"> <li>1. Check vents are clear of dirt / debris</li> <li>2. Reduce clamping force of the machine</li> <li>3. Reduce injection speed</li> <li>4. Ensure vents are deep enough</li> <li>5. Avoid entrapped air by changing flow profile</li> </ol>
11. Flash	<ol style="list-style-type: none"> <li>1. Increase clamp force</li> <li>2. Optimise change-over point</li> <li>3. Reduce holding pressure</li> <li>4. Reduce melt temperature</li> <li>5. Reduce mould temperature</li> <li>6. Stiffen mould</li> </ol>
12. Delaminating	<ol style="list-style-type: none"> <li>1. Eliminate contamination</li> <li>2. Check compatibility of dye / masterbatch</li> <li>3. Check moisture content</li> <li>4. Check melt homogeneity and plasticising performance</li> <li>5. Reduce injection speed</li> <li>6. Reduce melt temperature</li> <li>7. Increase mould temperature</li> </ol>



<b>Fault</b>	<b>Recommendation</b>
13. Blister	<ol style="list-style-type: none"> <li>1. Slow down or reduce decompression</li> <li>2. Check granule feed</li> <li>3. Increase back pressure and adjust screw speed</li> <li>4. Reduce metering stroke</li> </ol>
14. Dark spots	<ol style="list-style-type: none"> <li>1. Check granule for impurities</li> <li>2. Clean plasticising unit</li> <li>3. Reduce barrel temperature</li> <li>4. Reduce screw speed</li> <li>5. Reduce back pressure</li> <li>6. Check hot runner temperature</li> <li>7. Reduce regrind dose</li> </ol>
15. Cloudy / milky transparent parts	<ol style="list-style-type: none"> <li>1. Check for cross contamination with other polymers in every area of operation.</li> </ol>
16. Unusually low maximum service temperature	<ol style="list-style-type: none"> <li>1. Increase melt temperature</li> <li>2. Increase injection speed</li> <li>3. Optimise injection hold position and time</li> <li>4. Reduce injection pressure</li> <li>5. Increase mould temperature</li> <li>6. Maintain equal mould temperatures on both halves of mould tool</li> <li>7. Anneal parts at as high a temperature as possible</li> </ol>