

# FAQs

## **What is a "complete teardown and rebuild"?**

From the very beginning, Haynes realized the best way to understand a vehicle and write accurate, comprehensive repair procedures was to bring the vehicle into our workshop and actually take it apart – the way you would at home. To do this, we have purchased and disassembled countless vehicles – more than one for every book published. This process allows us to verify the procedures we put into the manual and provide the reader with hundreds of photographs. With mechanics and authors working together on each project, we discover new, simpler methods and work-arounds to avoid you having to use special tools. While the number of parts removed varies from project to project, the teardown is always to the extent necessary to provide an array of photographs and to develop the new methods required for the manual.

## **Do you produce or sell owner's manuals?**

Unfortunately this isn't included in our product range.

Where do I go to find a Haynes manual for my vehicle?

We've made it easy to search for a manual for your specific vehicle on the Haynes website. There are various ways you can proceed to find your vehicle:

1. You will find a Vehicle Search area (Find your manual) on the top part of most site pages where you can simply enter your vehicle "Year", the "Make" and "Model" to find out if we have a specific print and/or online manual book for your needs.
2. Using the top navigation selections, you will find category tabs most with drop-down selections for "Automotive Manuals", "Motorcycle Manuals", etc. You can start there and proceed to find your Make and Model.
3. You can enter your vehicle specifics into the search box. For example, "2005 Ford Explorer".

## **Why can't I find a manual for my vehicle?**

There are two possible reasons:

- 1/ It's too new.
- 2/ The model range did not have enough vehicles produced.

We typically do not produce manuals for vehicles less than two years old. And we don't consider creating a manual until there are enough vehicles on the road for us to cover the time and costs of developing one of our comprehensive manuals (which includes a complete teardown and rebuild of the vehicle and the time/costs to author and print the manual). There are thousands of year/make/model combinations of vehicles out there with new ones being introduced all the time. It would take an army of qualified technicians and writers to cover such quantities. We have to be a bit more selective.

## **What is a techbook and how is it different from a manual?**

The Haynes Techbook series provides an in-depth look at focused areas of vehicle repair that may span multiple years/makes/models, while our Haynes Repair Manuals series is year/make/model specific. Like the Haynes Repair Manuals series, each Techbook offers easy-to-follow text plus hundreds of hands-on photos to help you do the job right!

## **Is all the equipment on my vehicle covered in the manual?**

In most manuals, Haynes covers all popular sub-models, engine options and equipment installations. For example, a manual on a Ford Mustang would cover six-cylinder and V8 models,

the GT sub-model, manual and automatic transmission and accessories such as ABS and air conditioning. However, sub-models with very limited production, such as an SVT Cobra, may not be included. Any exclusions will be specifically listed in the manual description.

### **Does the manual cover the task I will be doing?**

Haynes covers procedures a typical do-it-yourselfer is likely to perform at home, such as maintenance, tune-up and removal/installation of components. When special equipment and knowledge is required, such as with a wheel alignment or a transmission overhaul, the procedure may not be included.

Here is a list of procedures that are generally covered in all Haynes automotive repair manuals. Some procedures may not apply to your vehicle if the component listed is not installed:

1. Accelerator cable – removal and installation
2. Air cleaner assembly – removal and installation
3. Air conditioning accumulator – removal and installation
4. Air conditioning compressor – removal and installation
5. Air conditioning receiver/drier – removal and installation
6. Air filter – replacement
7. Alternator – removal and installation
8. Antenna (radio) – removal and installation
9. Axle – removal and installation
10. Axle bearing – replacement
11. Axle housing – removal and installation
12. Axleshaft – removal and installation
13. Balance shaft - removal and installation
14. Balljoints (suspension) – replacement
15. Battery – replacement and maintenance
16. Battery cables – replacement
17. Blower motor – removal and installation
18. Brake booster (power) – removal and installation
19. Brake caliper – removal and installation
20. Brake fluid level – check
21. Brake light bulb – replacement
22. Brake light switch – replacement
23. Brake master cylinder – removal and installation
24. Brake pad – replacement
25. Brake shoe – replacement
26. Brake system – bleeding
27. Brake wheel cylinder – replacement
28. Break-in (engine)
29. Bumpers – removal and installation
30. Camshaft cover – removal and installation
31. Camshaft(s) – replacement
32. Carburetor – removal and installation
33. Charging system – check
34. Chassis lubrication
35. Clutch components – removal, inspection and installation
36. Clutch hydraulic system – bleeding
37. Clutch master cylinder – removal and installation
38. Clutch release bearing – removal and installation
39. Clutch slave cylinder – removal and installation
40. Clutch start switch – replacement
41. Coil spring (suspension) – replacement
42. Compression test (engine)
43. Compressor (air conditioning) – removal and installation
44. Computer codes – checking (where special equipment is not required)
45. Computer codes – clearing (where special equipment is not required)

46. Condensor (air conditioning) – removal and installation
47. Condensor (ignition) – replacement
48. Control arm (suspension) – removal and installation
49. Coolant (antifreeze) – check
50. Coolant temperature sending unit – replacement
51. Coolant temperature sensor – replacement
52. Cooling system servicing (coolant change)
53. Courtesy light bulb – replacement
54. Crankshaft oil seals (front and rear) – replacement
55. CV Joint boot – replacement
56. Cylinder head – replacement
57. Dashboard trim panels – removal and installation
58. Differential – removal and installation (RWD models only)
59. Distributor – removal and installation
60. Dome light bulb – replacement
61. Door – removal and installation
62. Door handle – removal and installation
63. Door latch – removal and installation
64. Door lock cylinder – removal and installation
65. Door lock switch (power) – removal and installation
66. Door trim panel – removal and installation
67. Driveaxle – replacement
68. Driveaxle boot – replacement
69. Drivebelt – replacement
70. Driveplate – removal and installation
71. Driveshaft – removal and installation
72. Driveshaft universal joints – replacement
73. Dwell (ignition) – adjustment (models with points ignition)
74. Electronic Control Module (ECM) (computer) – replacement
75. Engine – removal and installation
76. Engine mounts – replacement
77. Evaporative Emissions (EVAP) system – component replacement
78. Exhaust Gas Recirculation (EGR) valve – replacement
79. Exhaust manifold – removal and installation
80. Exhaust system – component replacement
81. Fan (cooling system) – removal and installation
82. Fan (heating and A/C) – removal and installation
83. Fender (front) – removal and installation
84. Flexplate – removal and installation
85. Flywheel – removal and installation
86. Freon – recharging
87. Front main seal (engine) – replacement
88. Fuel injectors – replacement
89. Fuel level sending unit – removal and installation
90. Fuel lines – removal and installation
91. Fuel pressure – relieving
92. Fuel pressure regulator – removal and installation
93. Fuel pump – removal and installation
94. Fuel rail – replacement
95. Grille (radiator) – removal and installation
96. Hall Effect switch (ignition) – replacement
97. Hazard flasher – replacement
98. Headlight – replacement
99. Heater core – replacement
100. Hood – removal and installation
101. Hub and bearing (4WD models) – replacement
102. Idle Speed Control (ISC) motor – removal and installation
103. Ignition coil – removal and installation

104. Ignition key lock cylinder – replacement
105. Ignition module – replacement
106. Ignition pick-up coil – replacement
107. Ignition switch – replacement
108. Ignition system – checking
109. Ignition timing check (when a part of maintenance)
110. Instrument cluster – removal and installation
111. Intake Air Control (IAC) valve – removal and installation
112. Intake manifold – removal and installation
113. Intake plenum – removal and installation
114. Jacking
115. Leaf spring (suspension) – replacement
116. Lifters (engine) – removal and installation
117. Liftgate – removal and installation
118. Liftgate latch – removal and installation
119. Liftgate trim panel – removal and installation
120. MAF (Mass Airflow) sensor – replacement
121. MAP (Manifold Absolute Pressure) sensor – replacement
122. Neutral Start Switch – replacement
123. OBD-II codes – checking
124. Oil change (engine)
125. Oil filter (engine) – replacement
126. Oil level (engine) – check
127. Oil pan – removal and installation
128. Oil pump – removal and installation
129. Parking brake – adjustment
130. Pilot bearing (clutch) – replacement
131. Pinion seal (differential) – replacement
132. Points (ignition) replacement
133. Power door lock motor – removal and installation
134. Power door lock switch – removal and installation
135. Power steering fluid level check
136. Power steering pump removal and installation
137. Power steering system – bleeding
138. Power window motor – removal and installation
139. Power window switch – removal and installation
140. Powertrain Control Module (PCM) (computer) - replacement
141. Pushrod (engine) – replacement
142. R-12 recharging
143. R-134a recharging
144. Radiator – removal and installation
145. Radio – removal and installation
146. Rear main seal (engine) – replacement
147. Rear window defogger – check and repair
148. Refrigerant recharging
149. Rocker arm cover – removal and installation
150. Rocker arms (engine) – removal and installation
151. Seats – removal and installation
152. Shift cable (transmission) – replacement
153. Shift lever – removal and installation
154. Shift linkage (transaxle) – adjustment
155. Shift linkage (transfer case) – adjustment
156. Shift linkage (transmission) – adjustment
157. Shock absorber – removal and installation
158. Spark plug replacement
159. Spark plug wires – replacement
160. Speakers – removal and installation
161. Speedometer (instrument cluster) – removal and installation

162. Stabilizer bar (suspension) – removal and installation
163. Starter motor – check
164. Starter motor – removal and installation
165. Starter solenoid – replacement
166. Steering gear removal and installation
167. Steering knuckle (suspension) – removal and installation
168. Steering wheel – removal and installation
169. Stereo – removal and installation
170. Strut (suspension) – removal and installation
171. Tailgate – removal and installation
172. Taillight bulb – replacement
173. Tappets (engine) – removal and installation
174. Thermostat (cooling system) – replacement
175. Throttle body – removal and installation
176. Throttle Body Injection (TBI) – disassembly and reassembly
177. Throttle cable – removal and installation
178. Throttle Position Sensor (TPS) – removal and installation
179. Throwout bearing (clutch) – replacement
180. Timing belt/chain – replacement
181. Timing chain cover – removal and installation
182. Tire rotation
183. Torsion bar (suspension) – removal and installation
184. Track bar (suspension) – removal and installation
185. Transfer case – removal and installation
186. Transfer case fluid level check
187. Transmission fluid change
188. Transmission fluid level check
189. Transmission mount – replacement
190. Transmission or transaxle – removal and installation
191. Trunk latch – removal and installation
192. Trunk lid – removal and installation
193. Tune-up
194. Turn signal flasher – replacement
195. Turn signal light bulb – replacement
196. Turn signal switch – replacement
197. U-joints (driveshaft) – replacement
198. Valve adjustment (when a part of maintenance)
199. Valve cover – removal and installation
200. Voltage regulator (charging system) – replacement
201. Water pump – check and replacement
202. Wheel bearing replacement and adjustment
203. Wheel cylinder (brake) – replacement
204. Window – removal and installation (sliding glass only)
205. Window switch (power) – removal and installation
206. Wiper (windshield) motor – replacement
207. Wiper (windshield) – replacement

### **How long does it take to produce a Haynes manual?**

From the time a vehicle arrives in our workshop to the time the manual is available is about 6 months. Writing a manual takes a team of technical authors roughly 3 months working with our Haynes certified mechanics during the vehicle teardown and rebuild process. This is followed by the manual production and proofing process and finally printing prior to distribution to retail locations in the U.S. and globally.

### **Why does the Contents table send me to the wrong page?**

All Haynes repair manuals have numbered Sections within each Chapter. The Contents refers to these Section numbers, NOT the page numbers. So Section 5 might be on Page 3.

### **What are Ft-lbs. and In-lbs. in the torque tables?**

When it is necessary to specify a torque value for a particular fastener, Haynes will provide it in either foot-pounds (ft-lbs.) or inch-pounds (in-lbs.). One foot-pound of torque is equivalent to 12 inch-pounds of torque. Torque values below approximately 15 ft-lbs. are expressed in inch-pounds, since most foot-pound torque wrenches are not accurate at these smaller values.