

**TM 9-1765B**

**W A R   D E P A R T M E N T**

**TECHNICAL MANUAL**



**ORDNANCE MAINTENANCE**

**ENGINE, POWER TRAIN, BRAKING  
AND STEERING SYSTEMS FOR  
BOMB SERVICE TRUCK M6 (Chevrolet)**

**FEBRUARY 25, 1943**

**FOR ORDNANCE PERSONNEL ONLY**



**RESTRICTED**

**TECHNICAL MANUAL** }  
**No. 9-1765B** }

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**ORDNANCE MAINTENANCE**

**ENGINE, POWER TRAIN, BRAKING AND STEERING**  
**SYSTEMS FOR BOMB SERVICE TRUCK M6 (Chevrolet)**

**Prepared under the direction of the**  
**Chief of Ordnance**

**(with the cooperation of the Chevrolet Motor**  
**Division, General Motors Corporation)**

**CONTENTS**

	<b>Paragraphs</b>	<b>Pages</b>
<b>CHAPTER 1. INTRODUCTION . . . . .</b>	<b>1-3</b>	<b>5</b>
<b>CHAPTER 2. ENGINE . . . . .</b>	<b>4-63</b>	<b>6-131</b>
<b>SECTION I. Introduction . . . . .</b>	<b>4-7</b>	<b>6-17</b>
<b>II. Trouble shooting . . . . .</b>	<b>8-13</b>	<b>18-24</b>
<b>III. Operations performed without re-</b> <b>moving engine from vehicle. . . . .</b>	<b>14-26</b>	<b>25-71</b>
<b>IV. Engine removal from vehicle. . . . .</b>	<b>27-28</b>	<b>72-74</b>
<b>V. Engine disassembly . . . . .</b>	<b>29-30</b>	<b>75-79</b>
<b>VI. Cleaning and inspection. . . . .</b>	<b>31-33</b>	<b>80-82</b>
<b>VII. Engine repair . . . . .</b>	<b>34-52</b>	<b>83-119</b>
<b>VIII. Engine assembly . . . . .</b>	<b>53-58</b>	<b>120-122</b>
<b>IX. Engine installation in vehicle. . . . .</b>	<b>59-61</b>	<b>123-126</b>
<b>X. Fits and tolerances. . . . .</b>	<b>62</b>	<b>127-130</b>
<b>XI. Special engine tools . . . . .</b>	<b>63</b>	<b>131</b>
<b>CHAPTER 3. ENGINE IGNITION SYSTEM. . . . .</b>	<b>64-85</b>	<b>132-144</b>
<b>SECTION I. Introduction . . . . .</b>	<b>64-67</b>	<b>132-134</b>
<b>II. Trouble shooting . . . . .</b>	<b>68</b>	<b>135</b>
<b>III. Operations performed without re-</b> <b>moving units from vehicle. . . . .</b>	<b>69-73</b>	<b>136-137</b>
<b>IV. Ignition units, removal from vehicle</b>	<b>74-77</b>	<b>138-139</b>
<b>V. Ignition units, disassembly. . . . .</b>	<b>78</b>	<b>140</b>
<b>VI. Ignition system parts, cleaning, in-</b> <b>spection, and replacement. . . . .</b>	<b>79-80</b>	<b>141-142</b>
<b>VII. Assembling distributor . . . . .</b>	<b>81</b>	<b>143</b>
<b>VIII. Ignition units, installation in vehicle</b>	<b>82-85</b>	<b>144</b>

**ORDNANCE MAINTENANCE — ENGINE, POWER TRAIN, BRAKING AND STEERING SYSTEMS  
FOR BOMB SERVICE TRUCK M6 (Chevrolet)**

	Paragraphs	Pages
CHAPTER 4. FUEL SYSTEM .....	86-102	145-175
SECTION I. Introduction .....	86-88	145
II. Trouble shooting .....	89	146-147
III. Fuel tank removal from vehicle...	90-91	148-149
IV. Fuel pump, removal and repair...	92-93	150-153
V. Fuel filter, removal and repair....	94-95	154-155
VI. Carburetor, removal and repair....	96-100	156-174
VII. Air cleaner, removal and maintenance .....	101-102	175
CHAPTER 5. CLUTCH ASSEMBLY .....	103-115	176-192
SECTION I. Introduction .....	103-106	176-179
II. Trouble shooting .....	107	180
III. Operations performed without removing clutch from vehicle.....	108-109	181-182
IV. Clutch disassembly .....	110-111	183-185
V. Cleaning and inspection.....	112	186-187
VI. Clutch installation in vehicle.....	113-114	188-191
VII. Special tools .....	115	192
CHAPTER 6. TRANSMISSION .....	116-131	193-217
SECTION I. Introduction .....	116-120	193-197
II. Trouble shooting .....	121-122	198-199
III. Operations performed without removing transmission from vehicle.	123-124	200-204
IV. Transmission removal from vehicle	125	205-207
V. Transmission disassembly and inspection .....	126-127	208-209
VI. Transmission repair and assembly.	128-129	210-214
VII. Transmission installation in vehicle	130	215
VIII. Fits and tolerances.....	131	216-217
CHAPTER 7. TRANSFER CASE .....	132-148	218-241
SECTION I. Introduction .....	132-136	218-220
II. Trouble shooting .....	137-138	221-222
III. Operations performed without removing transfer case from vehicle.	139-140	223-225
IV. Transfer case removal from vehicle	141	226-227
V. Transfer case disassembly.....	142-143	228-231

**CONTENTS**

	<b>Paragraphs</b>	<b>Pages</b>
<b>SECTION VI. Transfer case repair and assembly.</b>	<b>144-145</b>	<b>232-238</b>
<b>VII. Transfer case installation in vehicle</b>	<b>146</b>	<b>239</b>
<b>VIII. Fits and tolerances.....</b>	<b>147</b>	<b>240</b>
<b>IX. Special tools .....</b>	<b>148</b>	<b>241</b>
<b>CHAPTER 8. BRAKE SYSTEM .....</b>	<b>149-187</b>	<b>242-277</b>
<b>SECTION I. Introduction .....</b>	<b>149-152</b>	<b>242-244</b>
<b>II. Trouble shooting .....</b>	<b>153</b>	<b>245-246</b>
<b>III. Operations performed without removing units from vehicle.....</b>	<b>154</b>	<b>247</b>
<b>IV. Brake system units, removal from vehicle .....</b>	<b>155-160</b>	<b>248-252</b>
<b>V. Brake system units, disassembly..</b>	<b>161-163</b>	<b>253-256</b>
<b>VI. Brake system parts, cleaning, inspection, and repair.....</b>	<b>164-169</b>	<b>257-260</b>
<b>VII. Brake system units, assembly.....</b>	<b>170-171</b>	<b>261-262</b>
<b>VIII. Hydrovac system .....</b>	<b>172-177</b>	<b>263-270</b>
<b>IX. Brake system units, installation in vehicle .....</b>	<b>178-186</b>	<b>271-276</b>
<b>X. Fits and tolerances.....</b>	<b>187</b>	<b>277</b>
<b>CHAPTER 9. STEERING GEAR .....</b>	<b>188-208</b>	<b>278-295</b>
<b>SECTION I. Introduction .....</b>	<b>188-191</b>	<b>278-279</b>
<b>II. Trouble shooting .....</b>	<b>192</b>	<b>280</b>
<b>III. Steering gear removal.....</b>	<b>193-194</b>	<b>281-283</b>
<b>IV. Steering gear disassembly.....</b>	<b>195-199</b>	<b>284-286</b>
<b>V. Steering gear parts, cleaning, inspection, and replacement.....</b>	<b>200-201</b>	<b>287</b>
<b>VI. Assembling steering gear.....</b>	<b>202-204</b>	<b>288-292</b>
<b>VII. Steering gear assembly installation in vehicle .....</b>	<b>205-206</b>	<b>293</b>
<b>VIII. Fits and tolerances .....</b>	<b>207</b>	<b>294</b>
<b>IX. Special tools .....</b>	<b>208</b>	<b>295</b>
<b>CHAPTER 10. SHOCK ABSORBERS .....</b>	<b>209-223</b>	<b>296-308</b>
<b>SECTION I. Introduction .....</b>	<b>209-212</b>	<b>296-297</b>
<b>II. Shock absorber removal from vehicle .....</b>	<b>213-214</b>	<b>298</b>
<b>III. Shock absorber disassembly.....</b>	<b>215-216</b>	<b>299-301</b>

**ORDNANCE MAINTENANCE — ENGINE, POWER TRAIN, BRAKING AND STEERING SYSTEMS  
FOR BOMB SERVICE TRUCK M6 (Chevrolet)**

	Paragraphs	Pages
SECTION IV. Shock absorber parts, cleaning, inspection, and replacement.....	217-219	302-304
V. Assembling shock absorbers.....	220-221	305-306
VI. Installing shock absorber on vehicle	222	307
VII. Special tools .....	223	308
CHAPTER 11. STARTING MOTOR .....	224-237	309-320
SECTION I. Introduction .....	224-227	309-310
II. Trouble shooting .....	228	311
III. Starting motor removal.....	229	312-313
IV. Starting motor disassembly.....	230	314
V. Starting motor parts, cleaning, inspection, and repair .....	231-233	315-317
VI. Assembling starting motor.....	234-235	318
VII. Starting motor installation in vehicle .....	236	319
VIII. Fits and tolerances .....	237	320
CHAPTER 12. GENERATOR AND CONTROLS.....	238-265	321-347
SECTION I. Introduction .....	238-241	321-323
II. Trouble shooting .....	242	324
III. Operations performed without removing units from vehicle.....	243-245	325-331
IV. Removal of generator and controls from vehicle .....	246-247	332-333
V. Generator and regulator disassembly .....	248-249	334-335
VI. Generator and control parts, cleaning, inspection, and replacement.....	250-258	336-343
VII. Assembling generator and regulator.....	259-261	344-345
VIII. Generator and controls, installation in vehicle .....	262-264	346
IX. Fits and tolerances .....	265	347
CHAPTER 13. REFERENCES .....	266-267	348
INDEX.....		349-362

**CHAPTER 1**  
**INTRODUCTION**

	Paragraph
Scope.....	1
Arrangement of manual.....	2
Characteristics .....	3

**1. SCOPE.**

a. This manual is published for the information of ordnance maintenance personnel. It contains detailed instructions for inspection, disassembly, assembly, maintenance, and repair of Bomb Service Truck M6 (Chevrolet), supplementary to those in the field and technical manuals prepared for the using arms. Additional descriptive matter and illustrations are included to aid in providing a complete working knowledge of the materiel.

**2. ARRANGEMENT OF MANUAL.**

a. The chapters of this manual cover the maintenance operations of the following main assemblies: engine, ignition system, fuel system, clutch, transmission, transfer case, brake system, steering gear, shock absorbers, frame, starting motor, and generator and controls. Each chapter is broken down into sections which cover the removal, disassembly, inspection, repairs, assembly, and installation of the main assemblies. The section index covers the paragraphs of the various operations within the section.

**3. CHARACTERISTICS.**

a. The bomb service truck is a 4-wheeled vehicle used to load, unload, and tow bomb carrying trailers. The chassis and engine are basically the same as on the regular Chevrolet 4-wheel drive truck, differing only for the installation of a special cab and bomb handling hoist.

**ORDNANCE MAINTENANCE — ENGINE, POWER TRAIN, BRAKING AND STEERING SYSTEMS  
FOR BOMB SERVICE TRUCK M6 (Chevrolet)**

**CHAPTER 2**

**ENGINE**

**Section I**

**INTRODUCTION**

	Paragraph
General description .....	4
Data .....	5
Reference to operator's manual.....	6
Allocation of maintenance duties by echelons.....	7

**4. GENERAL DESCRIPTION.**

a. The heavy-duty engine shown in figures 1, 2, and 3 is a 4-cycle, 6-cylinder-in-line, valve-in-head type. The engine number is stamped on a machined surface on the right side of the block just back of the distributor. The cylinders are numbered from the fan, or front end of the engine. The engine turns in a clockwise direction, viewed from the front or cranking location.

b. It is often referred to as a 3-story engine; the oil pan, the cylinder block, and the cylinder head.

c. The pan is fitted with oil troughs, oil pipes for rod lubrication, and the oil gage rod.

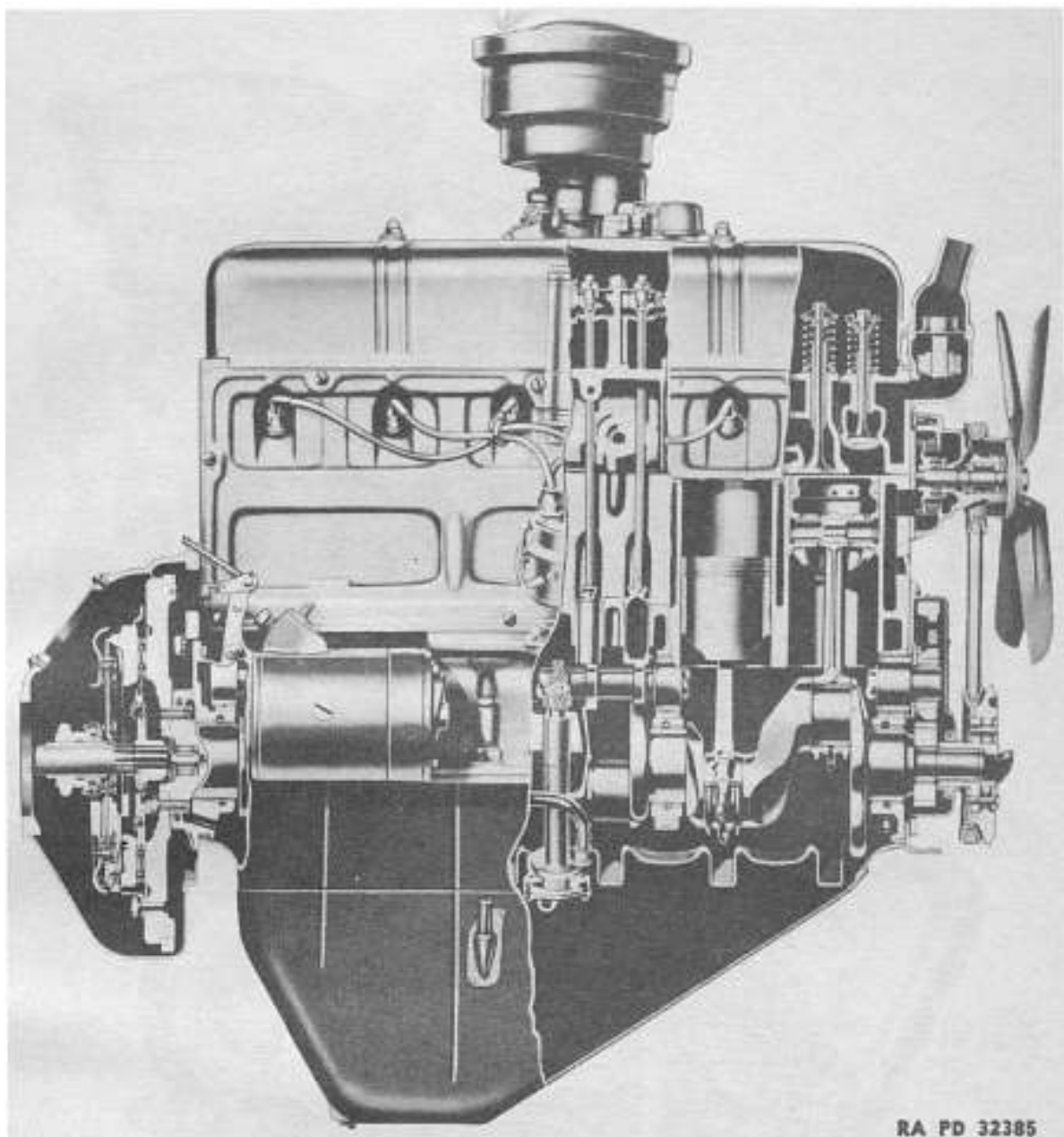
d. The cylinder block assembly is the major section as it is fitted with the crankshaft, camshaft, timing gear plate, timing gears, pistons, piston rings, connecting rods, and other miscellaneous parts. In addition to the above parts which are serviced as part of the cylinder block assembly, the following units are attached to this assembly when in the truck: water pump, oil pump, distributor, starter, generator, fly-wheel, clutch housing, harmonic balancer, fuel pump, valve lifter, and other miscellaneous parts.

e. The cylinder head as installed on the truck includes the valve guides, valves, valve springs, water outlet, manifolds, carburetor, temperature indicator fitting, rocker arm assemblies, and push rod cover.

**5. DATA.**

Type .....	Valve-in-head
Number of cylinders .....	6
Bore .....	$3\frac{9}{16}$ in.
Stroke.....	$3\frac{15}{16}$ in.

## INTRODUCTION

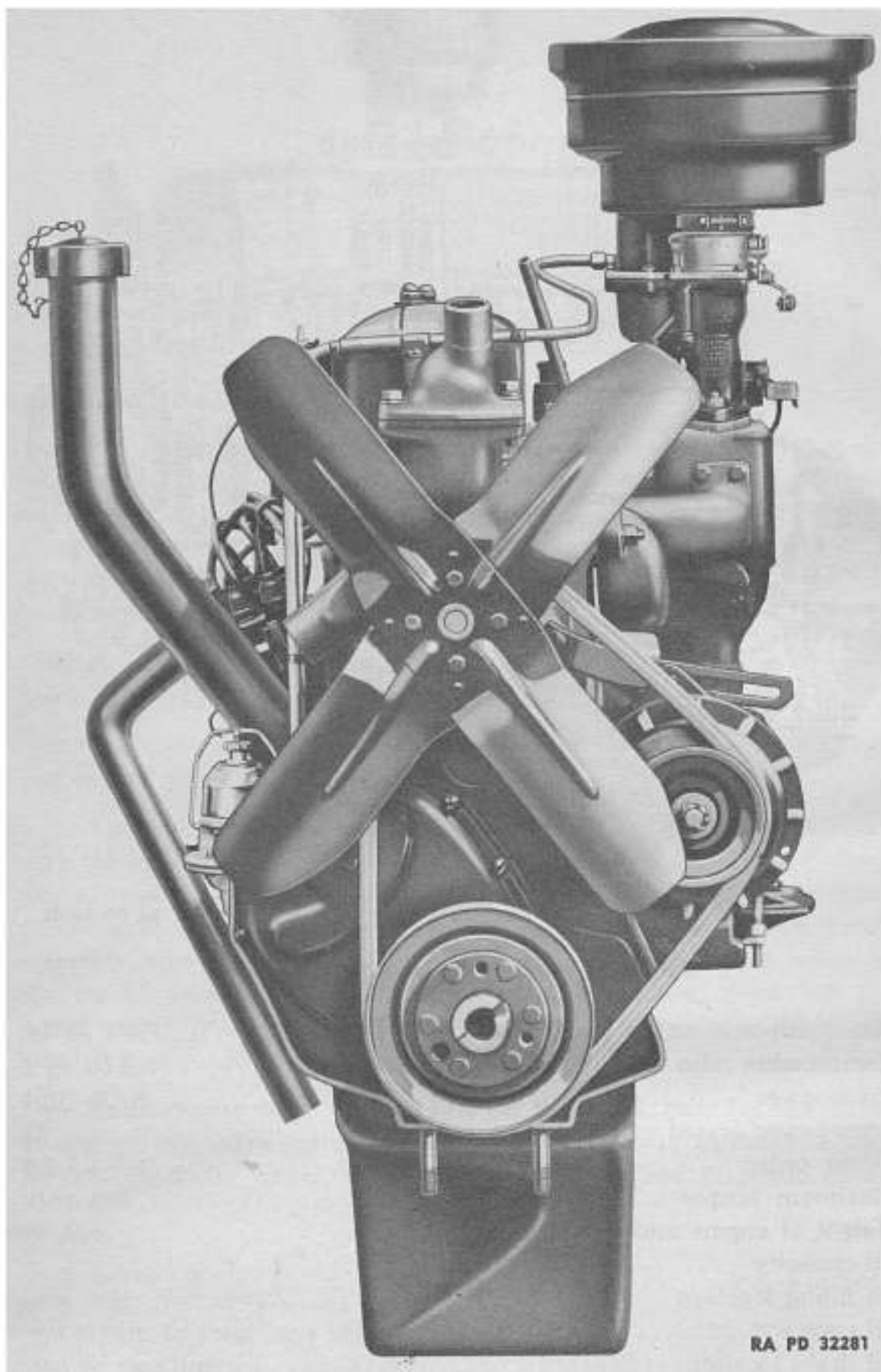


RA PD 32385

**Figure 1 — Engine — Cross Section**

Piston displacement .....	235.5 cu in.
Compression ratio .....	6.62 to 1
Horsepower .....	SAE 30.4
Horsepower (rated at 3,100 rpm) .....	93
Firing order .....	1-5-3-6-2-4
Maximum torque .....	192 ft-lb
Weight of engine and clutch .....	574 lb
Oil capacity .....	5 qt
Oil filling location .....	Breather, right side
Oil gage rod .....	Right side, back of distributor
Oil drain location .....	Bottom, rear of pan
Cylinder block drain .....	Left rear side of block

ORDNANCE MAINTENANCE—ENGINE, POWER TRAIN, BRAKING AND STEERING SYSTEMS  
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**Figure 2 — Engine — Front View**