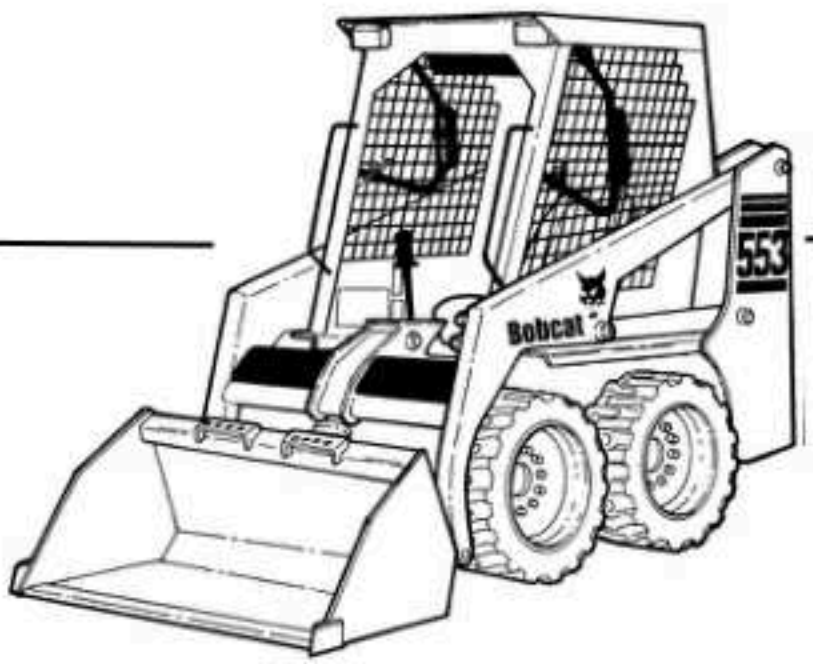
553

Bobcat®

Service Manual

S/N 528011001 & Above
S/N 528111001 & Above



EQUIPPED WITH BOBCAT INTERLOCK CONTROL SYSTEM (BICS™)

6903125 (2-06)

Ingersoll Rand
Compact Vehicle Technologies

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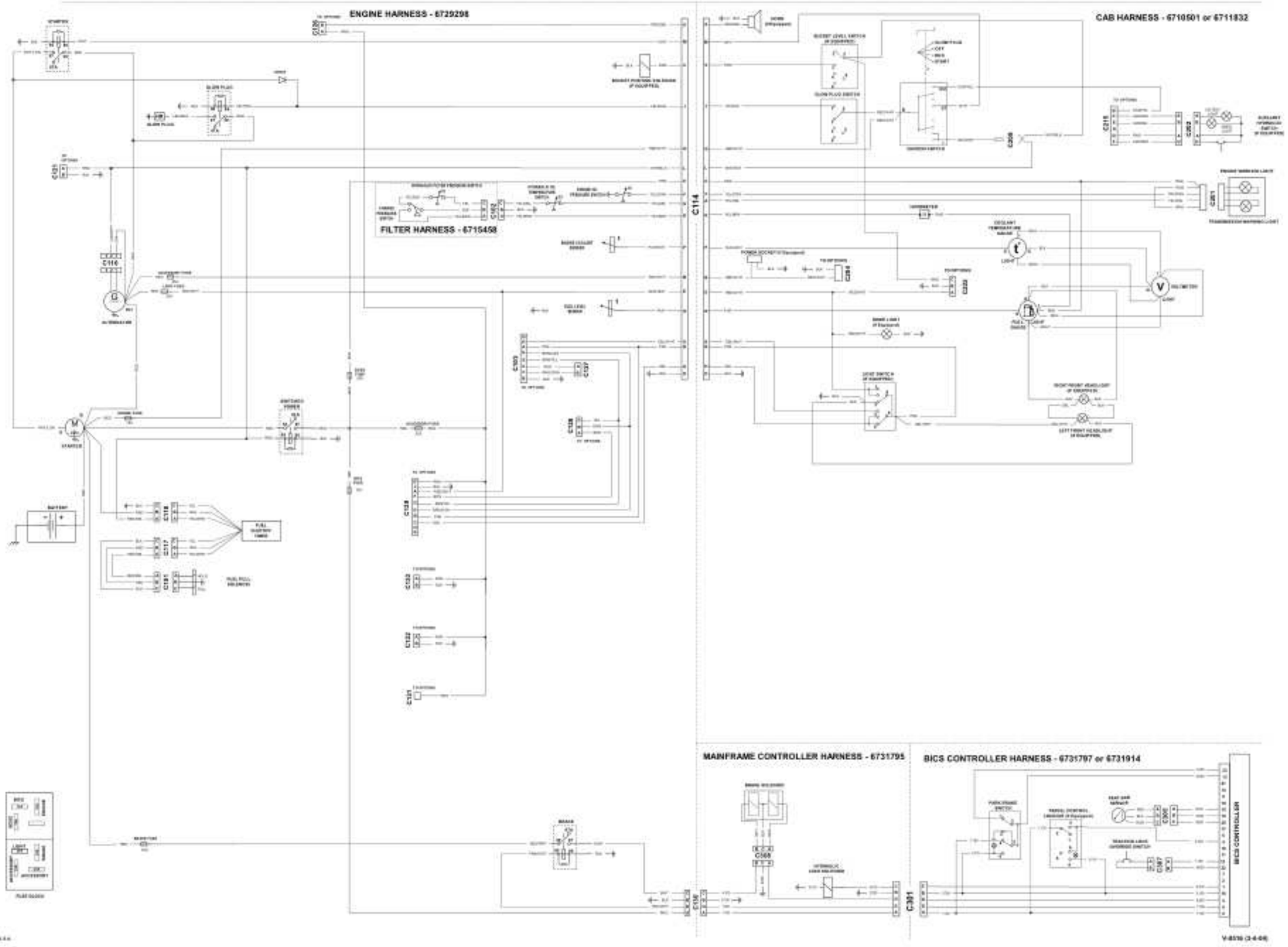
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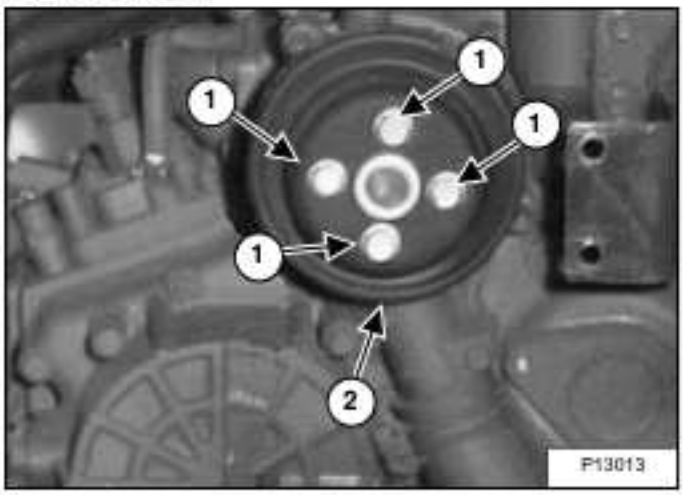
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Water Pump Removal And Installation

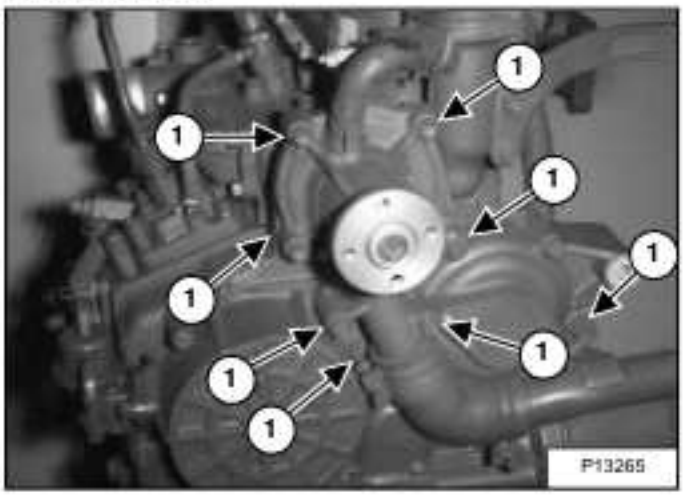
Figure 70-100-4



Remove the loader alternator. (See Removal And Installation on Page 60-30-1.)

Remove the four mounting bolts (Item 1) **[Figure 70-100-4]** from the belt pulley (Item 2) **[Figure 70-100-4]** and remove the pulley from the water pump.

Figure 70-100-5



NOTE: The bolts may vary in length. Keep the bolts in their original location.

Remove the seven mounting bolts (Item 1) **[Figure 70-100-5]** from the water pump.

Installation: Tighten the mounting bolts to 87-100 in.-lbs. (9,8-11,3 Nm) torque.

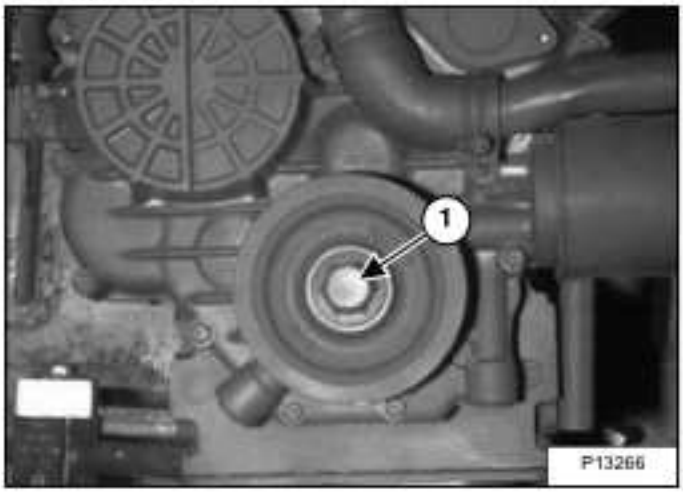
Remove the water pump from the engine.

Check the water pump for wear and replace if needed. Thoroughly clean the area between the water pump and the block flange.

Install a new water pump gasket and install the water pump.

Timing Gear Case Cover Removal And Installation

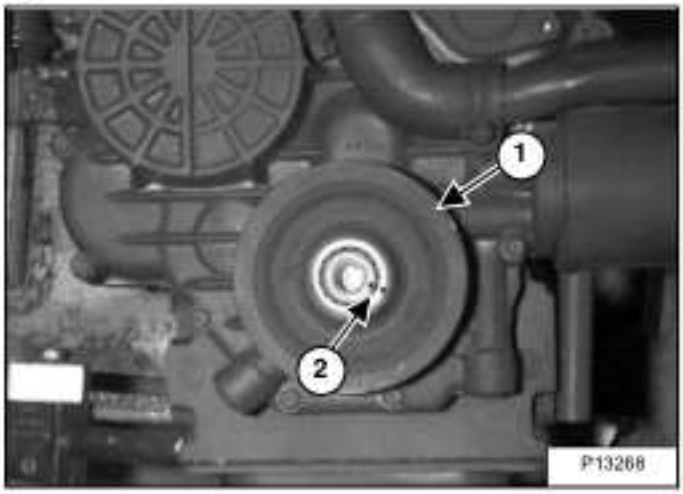
Figure 70-100-6



Remove crankshaft pulley bolt (Item 1) **[Figure 70-100-6]**.

Installation: Tighten crankshaft pulley bolt to 101-116 ft.-lbs. (137-157 Nm) torque.

Figure 70-100-7



Remove the crankshaft pulley (Item 1) **[Figure 70-100-7]** from the crankshaft.

Installation: When installing the crankshaft pulley on the crankshaft, align the timing marks (Item 2) **[[Figure 70-100-7]**

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All dimensions are given in inches. Respective metric dimensions are given in millimeters enclosed by parentheses.

Valve Springs

Free Length	1.457-1.476 (37,0-37,5)
Limit Permitted	1.437 (36,5)
Fitted Length	1.22 (31,0)
Load to Compress to Fitted Length	26.4 lbs. (11,98 kg)
Limit Permitted	22.5 lbs. (10,2 kg)
Limit Permitted for spring tilt	0.039 (1,0)

Rocker Arms

O.D. of Rocker Arm Shaft	0.4714-0.4718 (11,973-11,984)
I.D. of Rocker Arm Bushings	0.4724-0.4731 (12,000-12,018)
Clearance Between Rocker Arm & Bushing	0.0006-0.0018 (0,016-0,045)
Limit Permitted	0.0039 (0,10)

Camshaft

O.D. of Camshaft Bearing Journal	1.4147-1.4153 (35,934-35,950)
I.D. of Camshaft Bearing	1.4173-1.4183 (36,000-36,025)
Clearance Between Camshaft Bearing & Journal	0.0020-0.0036 (0,050-0,091)
Limit Permitted	0.0059 (0,15)
Alignment of the Camshaft	0.0004 (0,01)
Cam Lobe Height (Intake)	1.1339 (28,80)
(Exhaust)	1.1417 (29,00)
Limit Permitted (Intake)	1.1319 (28,75)
(Exhaust)	1.1398 (28,95)
Gear Backlash	0.0014-0.0045 (0,036-0,114)
Limit Permitted	0.059 (0,15)

Cylinders

I.D. of Cylinder Liner	3.0709-3.0716 (78,000-76,019)
Limit Permitted	+0.0059 (+0,15)
I.D. of Oversized Liner	0.0197 (+0,5)

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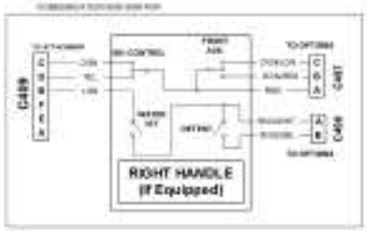
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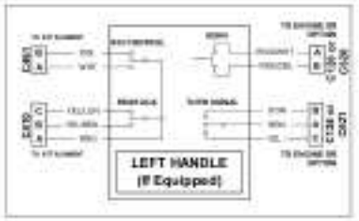
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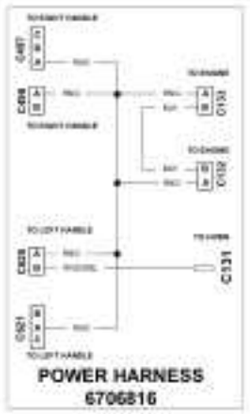
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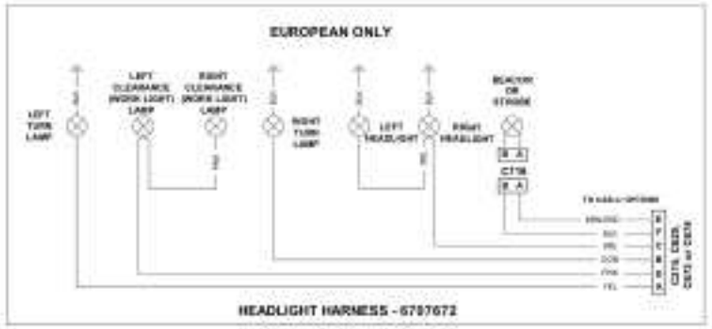


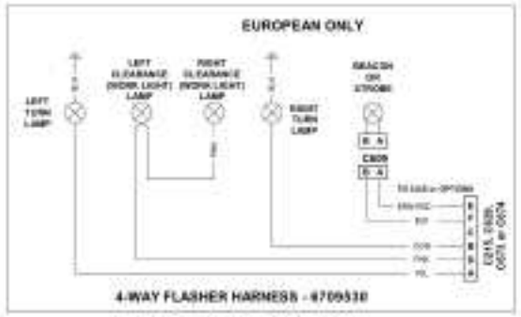






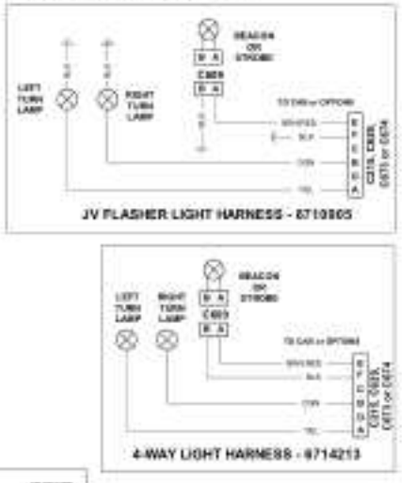


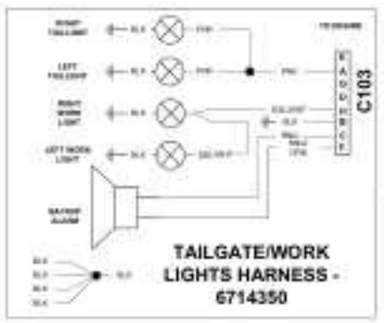


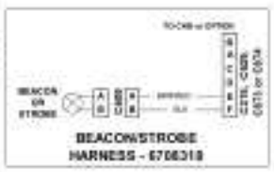


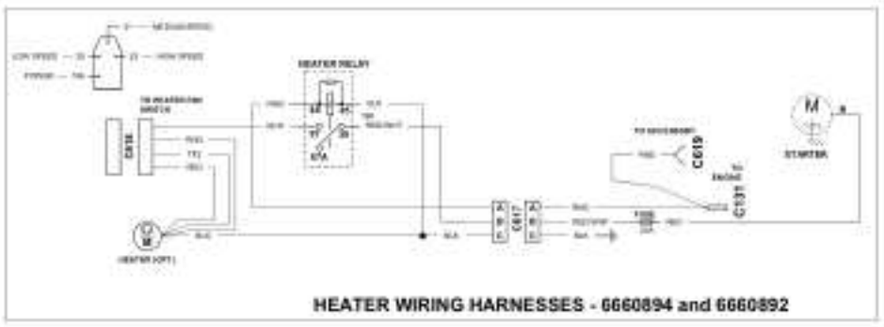


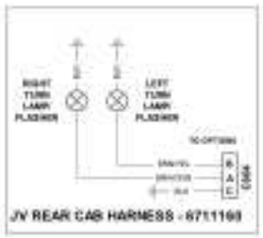






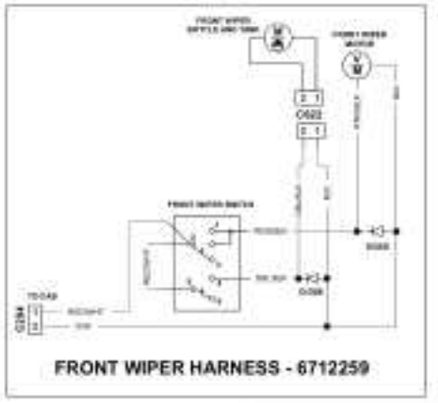


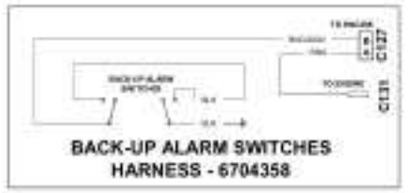


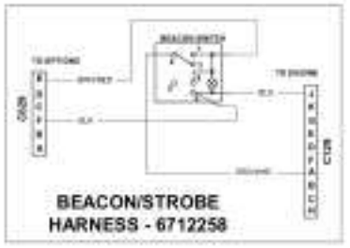




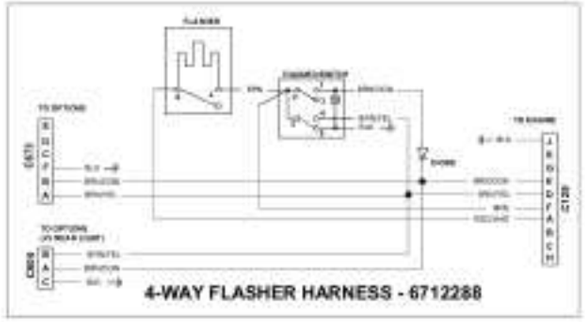


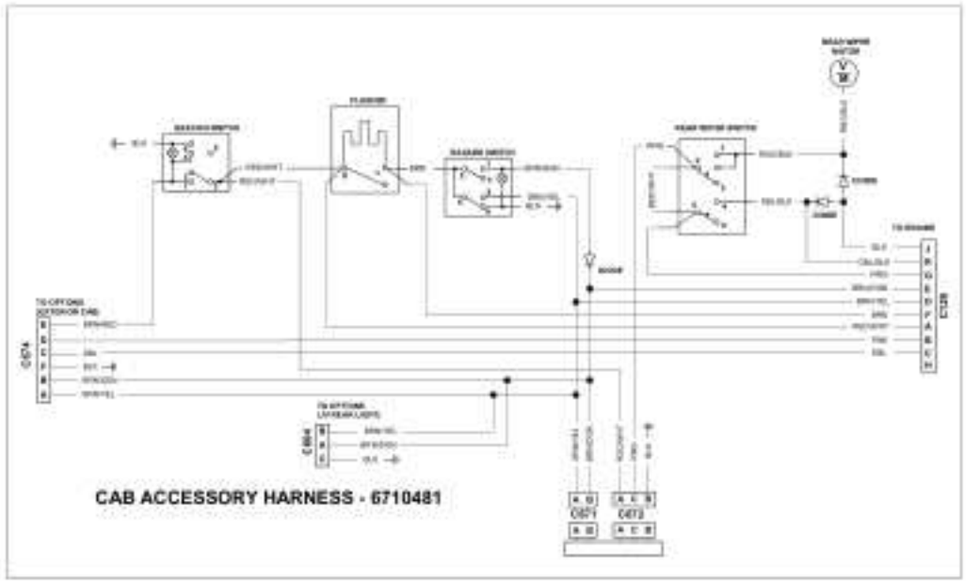












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