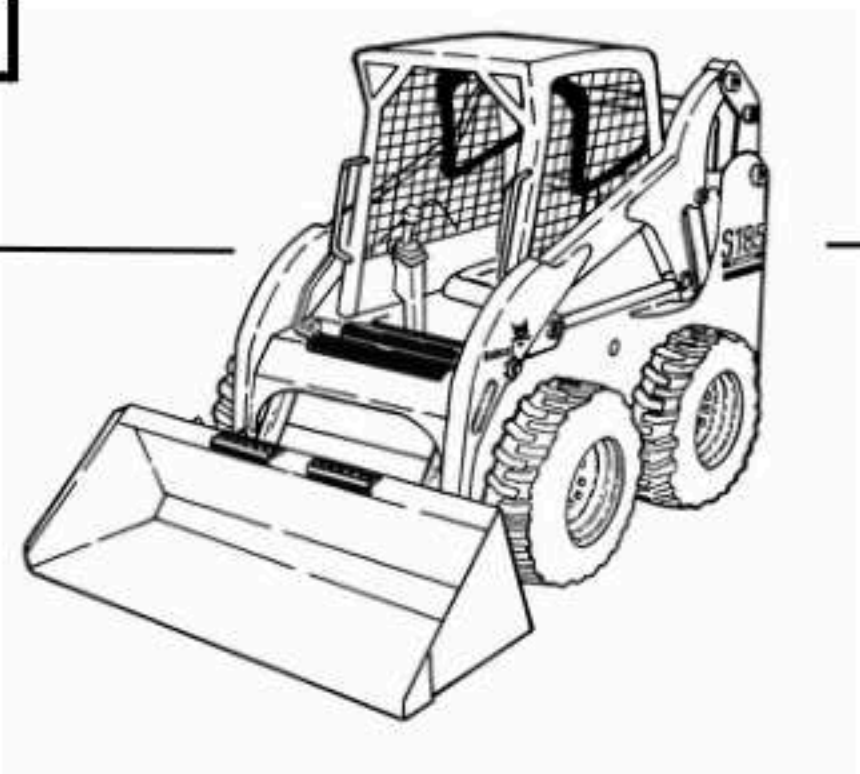
S175
S185
TURBO

INCLUDES HIGH FLOW

Bobcat®

Service Manual

S/N 517625001 & Above
S/N 518115001 & Above
S/N 519028001 & Above
S/N 519215001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6901828 (3-06)

Ingersoll Rand
Compact Vehicle Technologies
Printed in U.S.A.

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Front Accessory Panel Removal And Installation

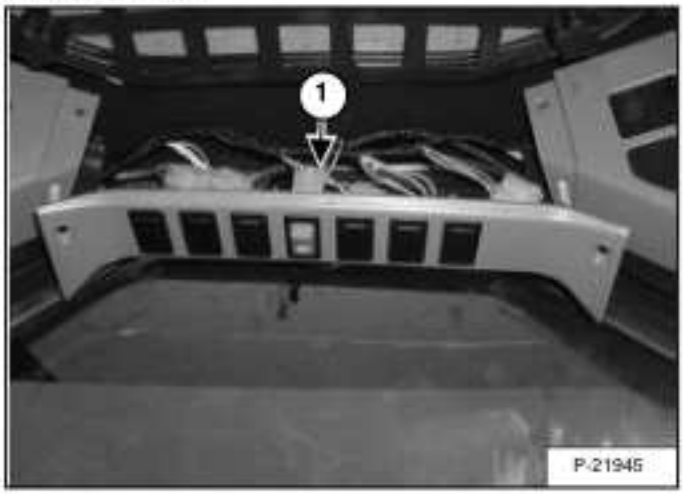
Figure 60-50-13



Remove the two mounting bolts (Item 1) **[Figure 60-50-13]**.

Installation: Be careful to not overtighten the front accessory panel mounting bolts to prevent damage to the plastic panel.

Figure 60-50-14



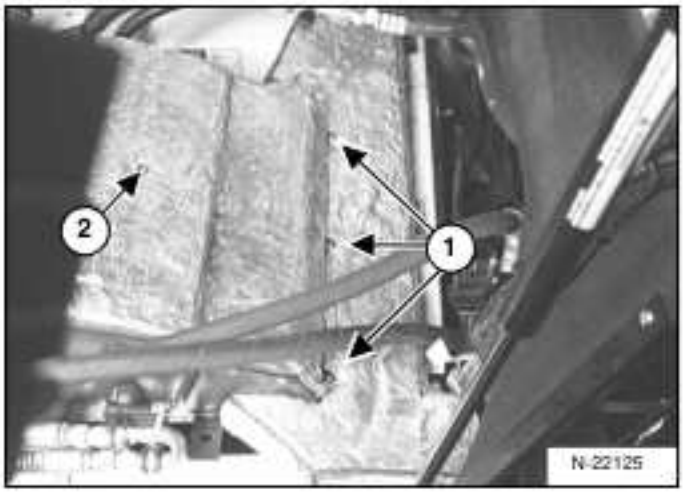
Pull the front accessory panel down and disconnect the wire harness connector(s) (Item 1) **[Figure 60-50-14]** from the switches.

Remove the panel.

Reverse the removal procedure to install the front accessory panel.

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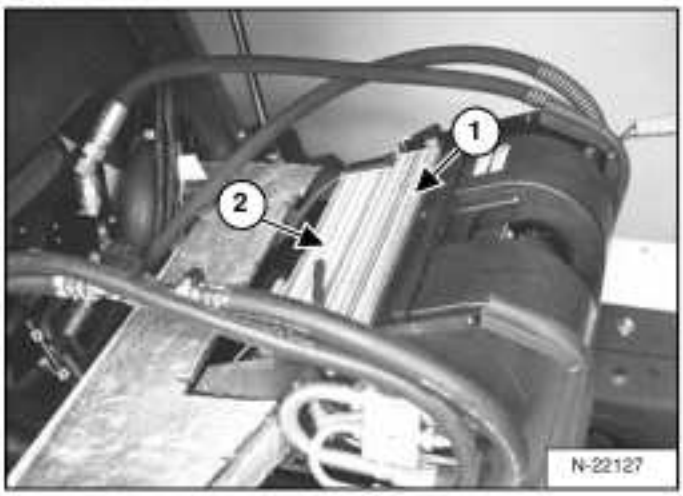
Figure 80-50-10



Remove the three mount bolts (Item 1) **[Figure 80-50-10]** and the one center mount bolt (Item 2) **[[Figure 80-50-10]** from the Evaporator/Heater Unit rear cover.

Remove the rear cover from the unit.

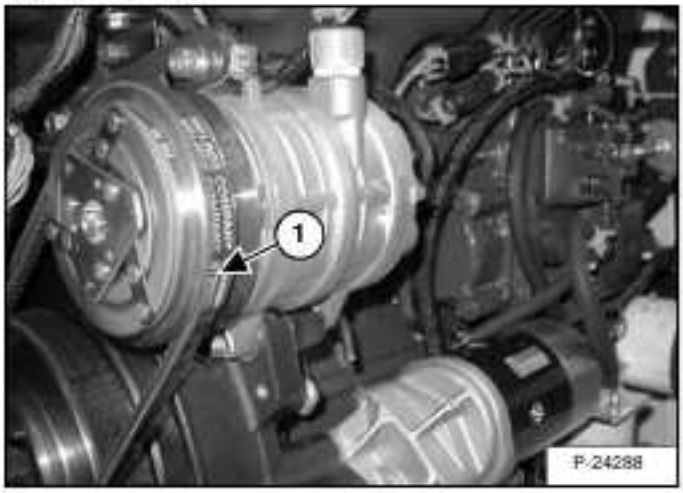
Figure 80-50-11



With air or water, clean the heater coil (Item 1) **[Figure 80-50-11]** and evaporator coil (Item 2) **[Figure 80-50-11]**

Compressor Drive Belt Inspection:

Figure 80-50-12



Regularly inspect (weekly) the compressor drive belt for wear.

Open the rear door.

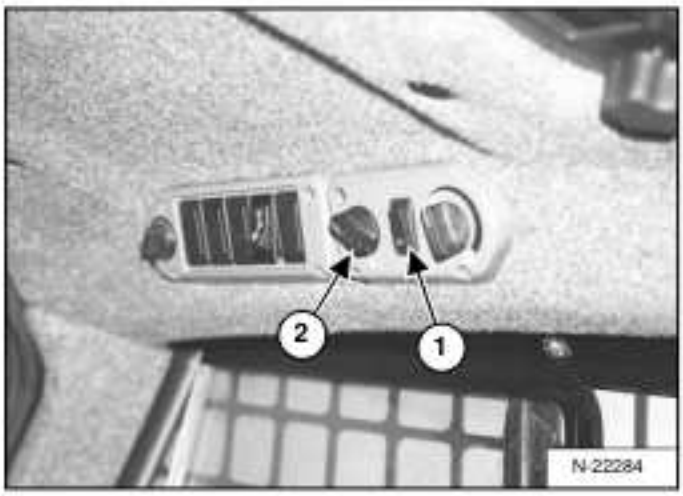
Remove the drive belt cover.

Remove the compressor belt cover.

Check the tension on the compressor belt (Item 1) **[Figure 80-50-12]**.

Checking The Electrical System

Figure 80-50-13



Check to see if the compressor clutch is engaging.

With an operator in the loader seat and the cab door open, turn the loader key switch to RUN (Standard Panel)

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ENGINE SPECIFICATIONS - KUOBTA V2003T-EB (TURBO)

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

Fuel Injection Nozzles

Opening Pressure	1991-2133 PSI (13721-14707 kPa)
Fuel Tightness Nozzle Seat	Dry Nozzle at 1849 PSI (12749 kPa)

Fuel Injection Pump

Fuel Tightness Plunger	10 sec: initial pressure 2133-1990 PSI (14707-13721 kPa)
Limit Permitted	5 seconds
Injection Timing	17-19 degrees B.T.D.C.
High Idle	2860-3000 RPM
Low Idle	1125-1175 RPM
Cylinder Bore	
I.D. of Bore	3.2677-3.2686 (83,0-83,022)
Allowable Limit	+0.006 (+0,15)

Cylinder Head

Cylinder Head Surface Distortion	0.002 (0,05) Max.
Thickness of Gasket (Used)	N/A
(New)	N/A
Top Clearance (Piston to Head)	0.0217-0.0276 (0,55-0,70)
Compression	412-440 PSI (2840-3303,8 kPa)
Allowable	355 PSI (2,45 MPa)
Difference Between Cylinders	10% or less

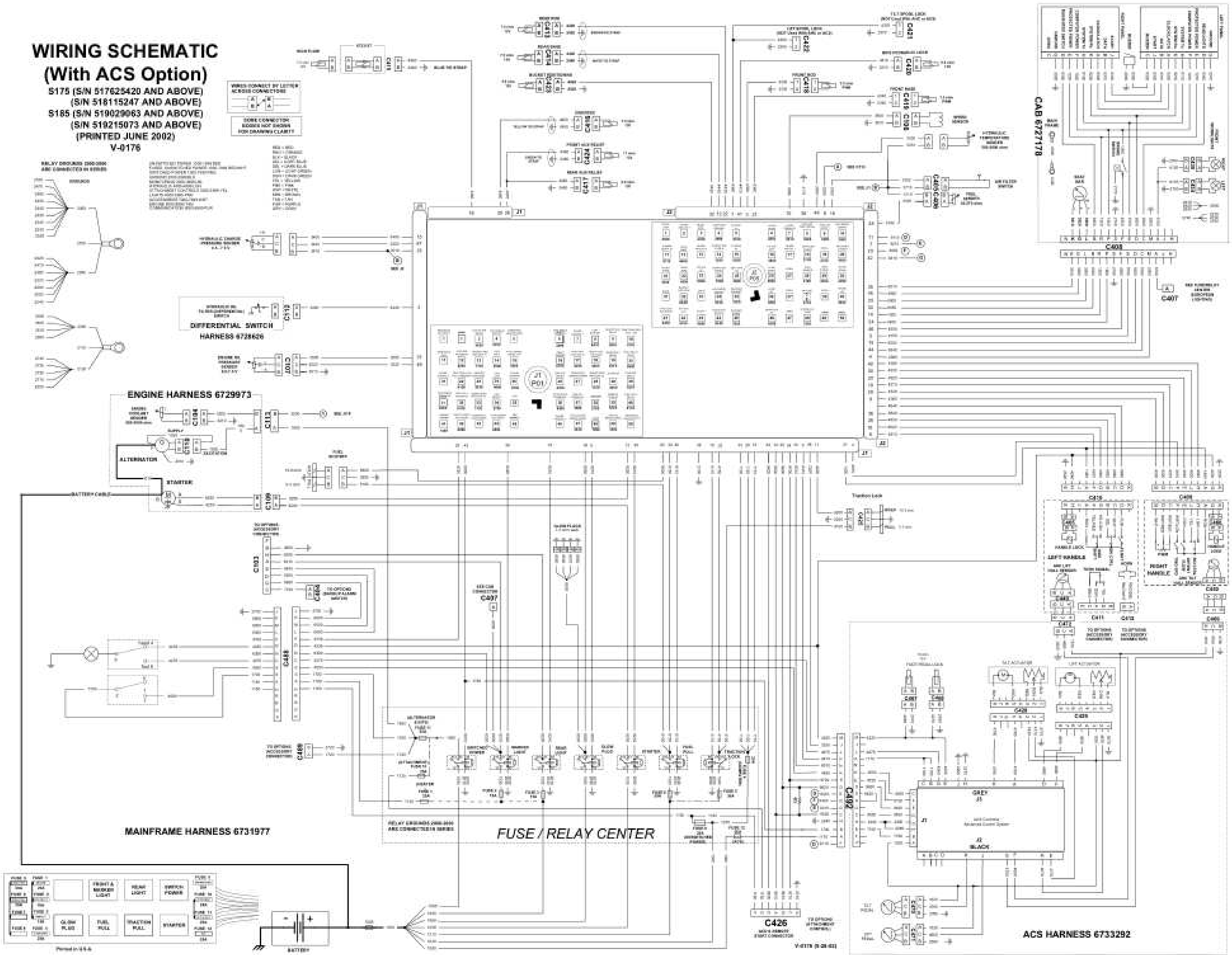
Valves

Valve Seat Width (Intake & Exhaust)	0.0835 (2,12)
Valve Seat Angle	Intake 60 degrees, exhaust 45 degrees
O.D. of Valve Stems	0.3134-0.3140 (7,96-7,98)
I.D. of Valve Guides	0.3156-0.3161 (8,015-8,03)
Clearance Between Valve Stem & Guide	0.0016-0.0026 (0,04-0,07)
Allowable Limit	0.0039 (0,1)
Valve Clearance (Cold)	0.0071-0.0087 (0,18-0,22)
Valve Recessing (Protrusion)	0.002 (0,05)
(Recess)	0.006 (0,15)

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WIRING SCHEMATIC
(With ACS Option)

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