V623

Bobcat®

VersaHANDLER

Service Manual

(S/N 367111001 - 367113000)
(S/N 367211001 - 367213000)



Ingersoll Rand
Compact Vehicle Technologies

6901675 (3-06)

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ALPHABETICAL INDEX

AIR CLEANER 70-01
AIR CLEANER SERVICE 10-01
AIR CONDITIONING SERVICE 80-01
AIR CONDITIONING SYSTEM FLOW 80-01
ALTERNATOR 60-01
AXLE AND DIFFERENTIAL 40-01
AXLE PIVOT FRAME 40-01
AXLES (FRONT AND REAR) 10-01
AXLE TOE-IN 40-01

BASIC TROUBLESHOOTING 80-01
BATTERY 60-01
BOOM ASSEMBLY 50-01
BOOM STOP 10-01
BRAKE LIGHT SWITCH 60-01
BRAKE VALVE 20-01
BUCKET POSITIONING CYLINDER 20-01

COMPONENTS 80-01
COMPRESSOR 80-01
CONDENSER 80-01
CONVERSIONS SPEC-01

DASH COVERING/STEERING COLUMN COVER 60-01
DRIVE BOX 20-01
DRIVE SHAFT 40-01

ELECTRICAL SYSTEM INFORMATION 60-01
ENGINE AND ENGINE MOUNTS 70-01
ENGINE COOLING SYSTEM 10-01
ENGINE COMPONENTS AND TESTING 70-01
ENGINE COVER 10-01, 50-01
ENGINE/HYDROSTAT ASSEMBLY 70-01
ENGINE LUBRICATION SYSTEM 10-01
ENGINE SPECIFICATIONS SPEC-01
ENGINE SPEED CONTROL 70-01
EVAPORATOR/BLOWER UNIT 80-01
EXPANSION VALVE 80-01
EXTENSION CYLINDER 20-01

FAN MOTOR 20-01
FENDER 50-01
FLYWHEEL AND HOUSING 70-01
FRAME LEVELING CYLINDER 20-01
FRONT AXLE 40-01
FRONT AXLE WITH FRAME LEVELING 40-01
FRONT WIPER MOTOR 60-01
FUEL SYSTEM 10-01
FUEL TANK 50-01

GEAR PUMP 20-01
GENERAL AIR CONDITIONING SERVICE GUIDELINES 80-01

HEATER ASSEMBLY 80-01
HYDRAULIC CONNECTION SPECIFICATION SPEC-01
HYDRAULIC CONTROL VALVE 20-01
HYDRAULIC/HYDROSTATIC FLUID SPECIFICATIONS SPEC-01
HYDRAULIC/HYDROSTATIC SYSTEM 10-01
HYDRAULIC RESERVOIR 20-01
HYDRAULIC SYSTEM INFORMATION 20-01
HYDROSTATIC DRIVE MOTOR 30-01
HYDROSTATIC PUMP 30-01
HYDROSTATIC SYSTEM INFORMATION 30-01

INCHING SWITCH 60-01
INNER BOOM 50-01
INSTRUMENT PANEL 60-01

JOYSTICK 20-01, 60-01
JOYSTICK PANEL 60-01

LIFT CYLINDER 20-01
LIFTING AND BLOCKING THE VersaHANDLER 10-01
LIGHTS 60-01
LUBRICATION 10-01

MACHINE TORQUE SPECIFICATIONS SPEC-01
MAIN RELIEF VALVE 20-01
MUFFLER 70-01

OIL COOLER 30-01
OPERATOR CAB 10-01, 50-01
OPERATOR SEAT 50-01

PARKING BRAKE 40-01
PEDAL ASSEMBLY 60-01
PIVOT LINK 50-01
PRESSURE SWITCH 80-01

QUICK TACH 50-01
QUICK TACH CYLINDER 20-01

RADIATOR 70-01
REAR WEIGHTS 50-01
REAR WIPER MOTOR 60-01
RECEIVER/DRIER 80-01
RECONDITIONING THE ENGINE 70-01
REGULAR MAINTENANCE 80-01

SAFETY 80-01
SERVICE SCHEDULE 10-01
SPARK ARRESTOR MUFFLER 10-01
STARTER 60-01
STEERING ANGLE ADJUSTMENTS 40-01
STEERING CYLINDER 20-01
STEERING MODE VALVE BLOCK 20-01
STEERING VALVE 20-01
SWITCH PANEL 60-01
SYSTEM CHARGING & RECLAMATION 80-01

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SYSTEM TROUBLESHOOTING.....80-01

TEMPERATURE/PRESSURE 80-01
TIRE MAINTENANCE 10-01
TILT CYLINDER 20-01
TOP WIPER MOTOR 60-01
TORQUE SPECIFICATIONS FOR BOLTS..... SPEC-01
TOWING THE VersaHANDLER 10-01
TRANSPORTING THE VersaHANDLER.....10-01
TRAVEL/SIGNAL LEVER 60-01
TROUBLESHOOTING.....40-01, 70-01

VersaHANDLER SPECIFICATIONS..... SPEC-01

WEAR PADS (FRONT).....50-01
WEAR PADS (REAR).....50-01

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CONTENTS

FOREWORD II

SAFETY INSTRUCTIONS V

SERIAL NUMBER LOCATIONS IX

DELIVERY REPORT X

BOBCAT VERSAHANDLER IDENTIFICATION X

SAFETY AND MAINTENANCE 10-01

HYDRAULIC SYSTEM 20-01

HYDROSTATIC SYSTEM 30-01

DRIVE SYSTEM 40-01

MAIN FRAME 50-01

ELECTRICAL SYSTEM AND ANALYSIS 60-01

ENGINE SERVICE 70-01

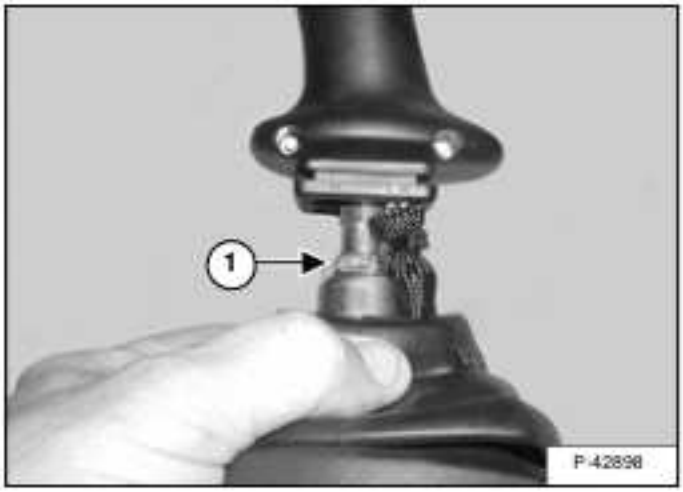
HEATING, VENTILATION, AIR CONDITIONING 80-01

SPECIFICATIONS SPEC-01

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Handle Removal And Installation (Cont'd)

Figure 20-180-5



Loosen the nut (Item 1) **[Figure 20-180-5]** and turn the handle counterclockwise.

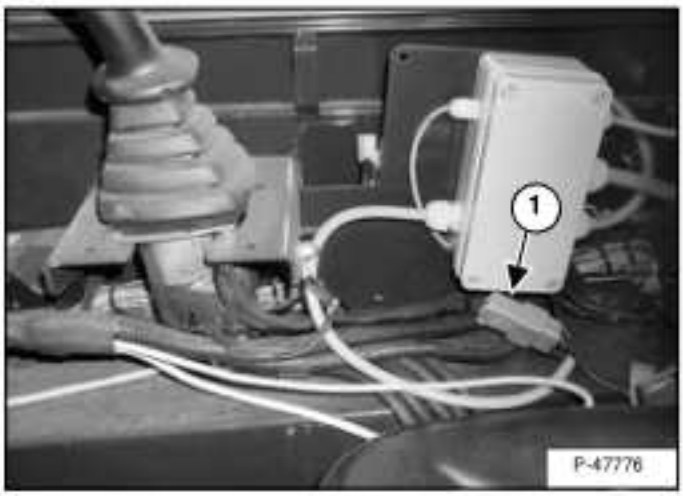
Remove the handle/harness assembly from the dust boot.

Joystick Removal And Installation

Remove the dash cover/steering column cover. (See Removal And Installation on Page 60-100-1.)

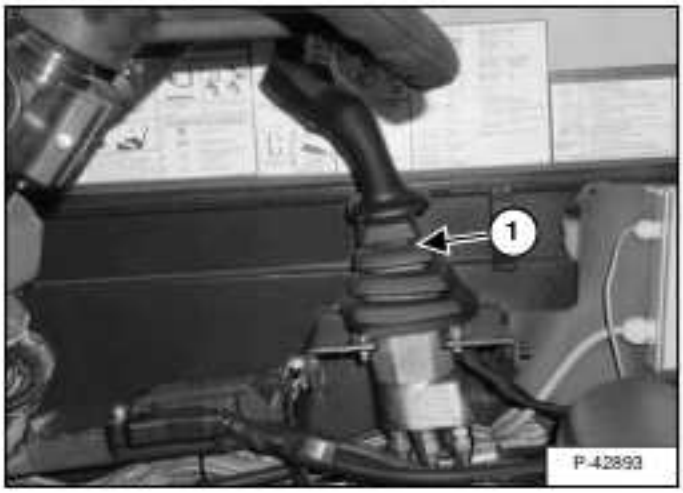
Remove the joystick panel. (See JOYSTICK PANEL on Page 60-50-1.)

Figure 20-180-6



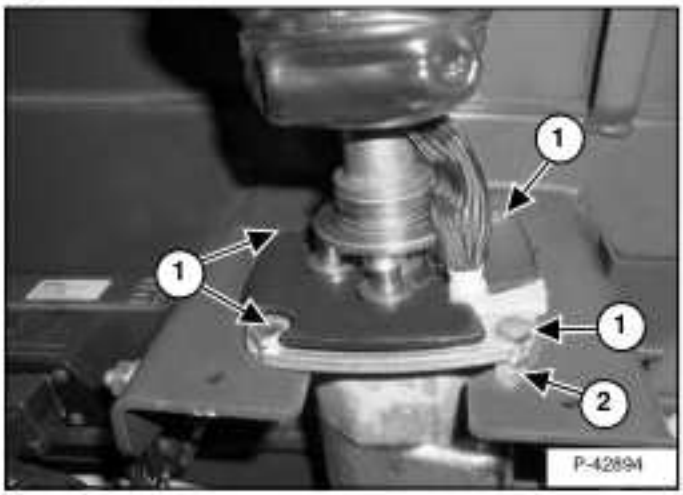
Disconnect the electrical connector (Item 1) **[Figure 20-180-6]**.

Figure 20-180-7



Raise the dust boot (Item 1) **[Figure 20-180-7]**.

Figure 20-180-8



Remove the four mounting bolts (Item 1) and spacer nuts (Item 2) **[Figure 20-180-8]**.

Installation: Note the location and quantity of the spacer nuts for correct installation.

⚠ WARNING

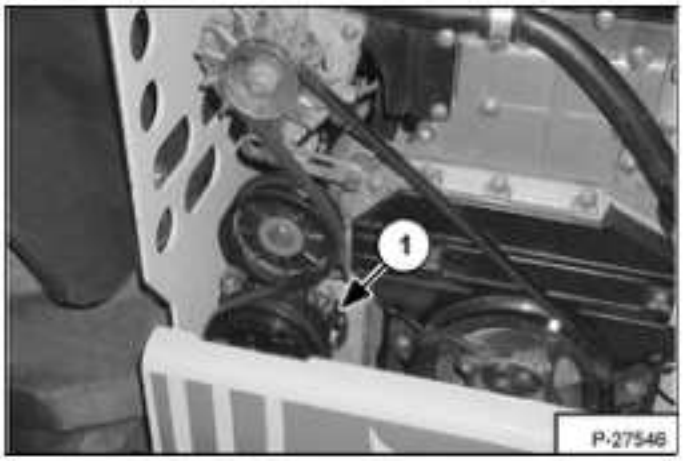
Hydraulic fluid escaping under pressure can have sufficient force to enter a person's body by penetrating the skin. This can cause serious injury and possible death if proper medical treatment by a physician familiar with this injury is not received immediately.

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Checking The Electrical System

Figure 80-50-4



Check to see if the compressor clutch (Item 1) **[Figure 80-50-4]** is engaging.

Turn the ignition key switch to the RUN position without starting the machine.

Figure 80-50-5



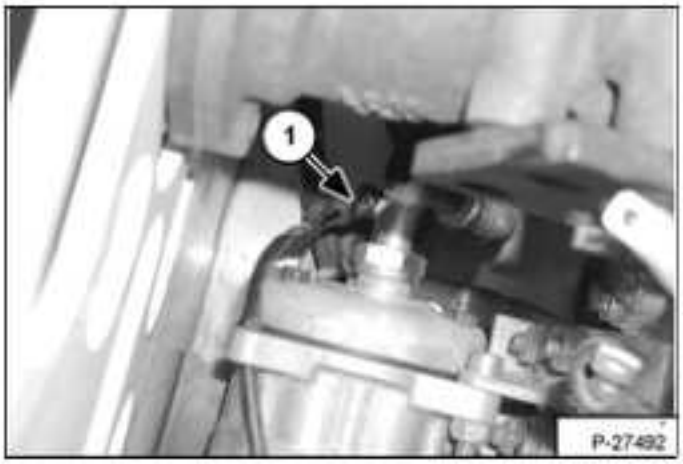
Turn the blower fan switch (Item 1) **[Figure 80-50-5]** to the first on position, the compressor clutch should make a click sound, which indicates the clutch is engaging.

Figure 80-50-6



If the compressor clutch does not engage, check the fuse (Item 1) **[Figure 80-50-6]**. Replace the fuse if needed.

Figure 80-50-7



Unplug the connector (Item 1) **[Figure 80-50-7]** from the compressor.

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

Connecting Rods And Bearings

Connecting Rod Type	H Section, Wedge Shape Small End
Connecting Rod Cap Location	Flat joint face with dowels
Crank Pin End Diameter	2.6460-2.6465 (67,21-67,22)
Piston Pin End	1.656-1.657 (42,07-42,09)
Length Between Centers	8.624-8.626 (219,05-219,10)
Bearing Type	Steel Back, Lead Bronze Bearing Material with Lead Finish
Bearing Width	1.242-1.255 (31,55-31,88)
Bearing Thickness At The Center	0.0723-0.0726 (1,835-1,844)
Bearing Clearance	0.0012-0.0032 (0,03-0,081)
Bearing Undersize Available	-0.010 (-0,25), -0.020 (-0,51), -0.030 (-0,76)

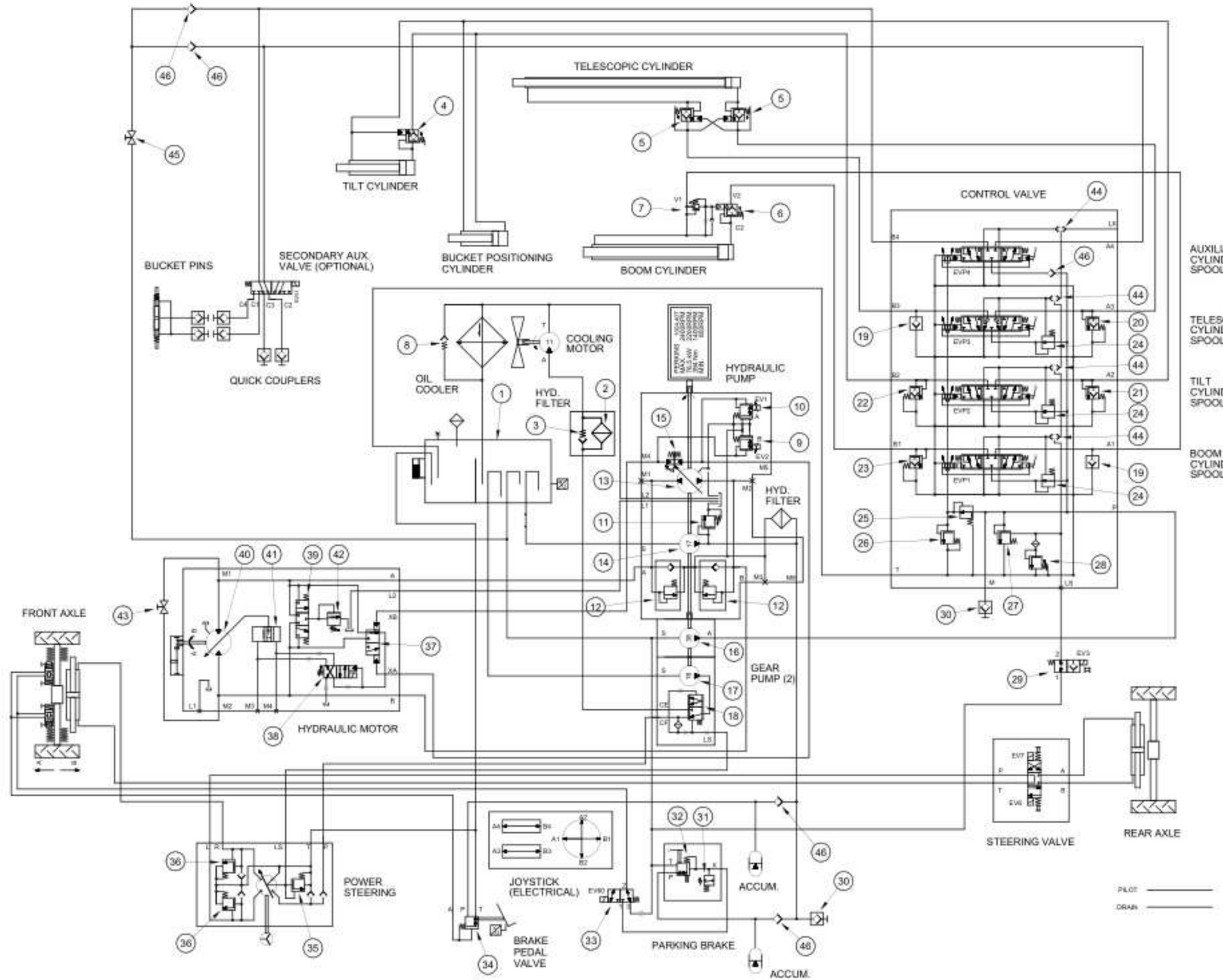
Crankshaft

Main Journals	2.998-2.999 (76,16-76,18)
Maximum Wear And Out Of Round Of The Journals And Crank Pins	0.0016 (0,04)
Width Of Front Journal	1.454-1.484 (36,93-37,69)
Width Of Center Journal	1.738-1.741 (44,15-44,22)
Width Of Other Journals	1.545-1.549 (39,24-39,35)
Crank Pin Diameters	2.499-2.500 (63,47-63,49)
Width Of Crank Pins	1.589-1.591 (40,35-40,42)
Crankshaft End Play	0.00075 (0.019)
Thrust Washer Thickness: Std.	0.090-0.091 (2,26-2,31)
Oversize	0.096-0.098 (2,24-2,50)
Main Bearing Oil Clearance	0.0022-0.0046 (0,057-0,117)

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HYDRAULIC/HYDROSTATIC SCHEMATIC
V623 (S/N 367111001 - 367112500)
AND (S/N 367211001 - 367212500)

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