763

763

HIGH FLOW

Bobcat®

Service Manual

S/N 512212001 thru 512249999
S/N 512440001 thru 512449999
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EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)



IR Bobcat
Printed in U.S.A.

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ALPHABETICAL INDEX

ACTUATORS 10–1
ACTUATOR VOLTAGE TEST 10–1
A.H.C. COMPONENTS 10–1
A.H.C./PWM CONTROLLER 10–1
A.H.C. HANDLE 10–1
A.H.C. STEERING LEVER 10–1
AIR CLEANER 7–1
AIR CLEANER SERVICE 1–1
ALTERNATOR 6–1
ALTERNATOR BELT 1–1
AXLE SEAL 4–1
AXLE, SPROCKET AND BEARINGS 4–1

BATTERY 6–1
BICS™ SYSTEM CONTROLLER 8–1
BICS VALVE 2–1
BLOWER HOUSING/FAN GEARBOX 7–1
BOBCAT INTERLOCK CONTROL SYSTEM (BICS™) 8–1, 10–1
BOB–TACH 1–1, 5–1
BOSS® DIAGNOSTIC TOOL 8–1
BOSS® INSTRUMENT PANEL 8–1

CHAINCASE COVERS 4–1
CHAINCASE FLUID 4–1
CONTROL PANEL 3–1
CONTROL PEDALS 2–1
CRANKSHAFT AND BEARINGS 7–1
CRANKSHAFT GEAR 7–1
CYLINDER BORE 7–1
CYLINDER HEAD 7–1

DECIMAL & MILLIMETER EQUIVALENTS 9–1
DRIVE BELT 1–1
DRIVE BELT HOUSING 3–1
DRIVE CHAIN 4–1

ELECTRICAL/HYDRAULIC (CONTROL REF.) 8–1
ELECTRICAL SYSTEM INFORMATION 6–1
ENGINE 7–1
ENGINE COMPRESSION 7–1
ENGINE COOLING SYSTEM 1–1
ENGINE LUBRICATION SYSTEM 1–1
ENGINE MUFFLER 7–1
ENGINE SPECIFICATIONS 9–1
ENGINE SPEED CONTROL 7–1

FAN GEARBOX 1–1, 7–1
FINAL DRIVE TRANSMISSION (CHAINCASE) 1–1
FIXED DRIVE BELT TENSIONER PULLEY 3–1
FLYWHEEL 7–1
FRONT LIGHTS 6–1
FUEL CAMSHAFT 7–1
FUEL INJECTION NOZZLES 7–1
FUEL INJECTION PUMP 7–1
FUEL SYSTEM 1–1
FUEL TANK 5–1

GLOW PLUGS 7–1

HANDLE CONTROL UNIT 10–1
HYDRAULIC CONTROL VALVE 2–1
HYDRAULIC CONTROL VALVE (AHC) 10–1
HYDRAULIC CYLINDER IDENTIFICATION 2–1
HYDRAULIC CYLINDERS 2–1
HYDRAULIC FILTER HOUSING 2–1
HYDRAULIC FLUID RESERVOIR 2–1
HYDRAULIC/HYDROSTATIC FLUID SPECIFICATIONS 9–1
HYDRAULIC/HYDROSTATIC SYSTEM 1–1
HYDRAULIC PUMP 2–1
HYDRAULIC SYSTEM INFORMATION 9–1
HYDROSTATIC DRIVE MOTOR 3–1
HYDROSTATIC DRIVE MOTOR 30 SERIES 3–1
HYDROSTATIC PUMP 3–1
HYDROSTATIC SYSTEM INFORMATION 3–1

IDLER GEAR AND CAMSHAFT 7–1

LIFT ARM SUPPORT DEVICE 1–1
LIFT ARMS 5–1
LIFT CYLINDER(S) 2–1
LIFT LOCK BY–PASS VALVE 2–1
LIFTING AND BLOCKING THE LOADER 1–1
LIFTING THE LOADER 1–1
LOADER SPECIFICATIONS – 763 9–1
LUBRICATING THE LOADER 1–1

MONITOR SERVICE CODES 8–1
MOTOR CARRIER 4–1

OIL COOLER 3–1
OIL PUMP 7–1
OPERATOR CAB 1–1, 5–1
OPERATOR CAB GAS CYLINDER 5–1
OPERATOR SEAT 5–1

PARKING BRAKE 4–1
PARKING BRAKE DISC 4–1
PEDAL INTERLOCK LINKAGE 2–1
PISTON AND CONNECTING ROD 7–1

RADIATOR 7–1
REAR DOOR 5–1
REAR GRILL 5–1
REAR LIGHTS 5–1
RELAY SWITCHES 6–1
REMOTE START SWITCH 1–1
ROCKER ARM AND SHAFT 7–1
RPM SENSOR 8–1

SEAT BAR (W/COMPRESSION SPRINGS) 5–1
SEAT BAR (W/GAS CYLINDER) 5–1
SEAT BAR RESTRAINT SYSTEM 1–1
SEAT BAR SENSOR 8–1
SEAT SENSOR 8–1
SELECT VALVE (763H) 2–1
SENDER AND SENSOR 8–1
SERVICE SCHEDULE 1–1
SPARK ARRESTOR MUFFLER 1–1
SPRING LOADED DRIVE BELT TENSIONER PULLEY 3–1
STANDARD INSTRUMENT PANEL 6–1
STANDARD TORQUE SPECIFICATIONS FOR BOLTS 9–1
STARTER (DELCO REMY) 6–1
STARTER (DENSO) 6–1
STEERING LINKAGE 3–1
SWITCH HANDLE 10–1
STOPPING THE BOBCAT LOADER 1–1

TILT LOCK VALVE 2–1
TILT CYLINDER 2–1
TIMING GEARS 7–1
TIMING GEARCASE COVER 7–1
TIRE MAINTENANCE 1–1
TORQUE SPECIFICATIONS FOR LOADER 9–1
TOWING THE LOADER 1–1
TRACTION LOCK 8–1
TRACTION LOCK GUIDES 4–1
TRANSPORTING THE LOADER 1–1
TROUBLESHOOTING 2–1, 3–1, 6–1, 7–1, 10–1
TROUBLESHOOTING THE BOSS® & L.C.D. DISPLAY 8–1

U.S. TO METRIC CONVERSION 9–1

VALVE, VALVE SEAT AND GUIDE 7–1

WATER PUMP 7–1

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CONTENTS

FOREWORD ii
SAFETY INSTRUCTIONS v
SERIAL NUMBER LOCATIONS vii
DELIVERY REPORT vii
BOBCAT LOADER IDENTIFICATION viii
PREVENTIVE MAINTENANCE 1–1
HYDRAULIC SYSTEM 2–1
HYDROSTATIC SYSTEM 3–1
DRIVE SYSTEM 4–1
MAIN FRAME 5–1
ELECTRICAL SYSTEM 6–1
ENGINE SERVICE 7–1
SYSTEMS ANALYSIS 8–1
SPECIFICATIONS 9–1
ADVANCED HAND CONTROL SYSTEM 10–1

CALIFORNIA
PROPOSITION 65 WARNING
Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

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Removal And Installation



Raise the lift arms and install an approved lift arm support device. (See Page 1–1.)



Stop the engine. Use the lift lock valve knob to release the hydraulic pressure. Raise the seat bar.

Raise the operator cab. (See Page 1–1.)

Remove the steering control panel. (See Page 3–1.)

Clean area around the control valve.

Mark all tubelines for correct installation.

Disconnect the wire harness connectors (Item 1) **[A]** from the auxiliary solenoid connectors.

Disconnect the wire harness connector (Item 2) **[A]** from the BICS™ valve solenoid connector.

Installation: Install a never modify sta–strap around the connector (Item 2) **[A]**.

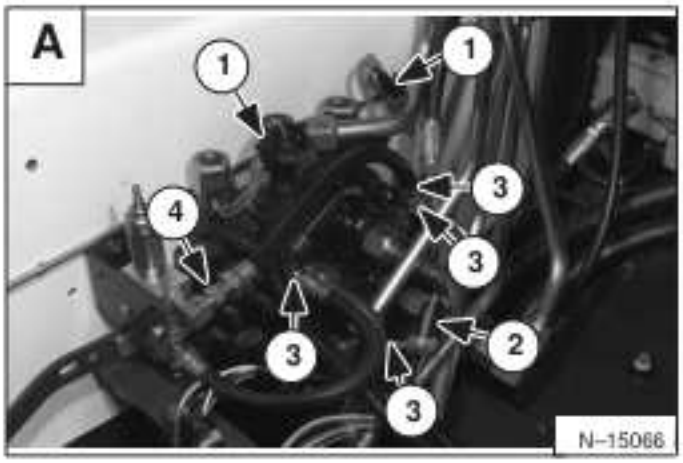
Disconnect the drain hoses (Item 3) **[A]** from the main control valve.

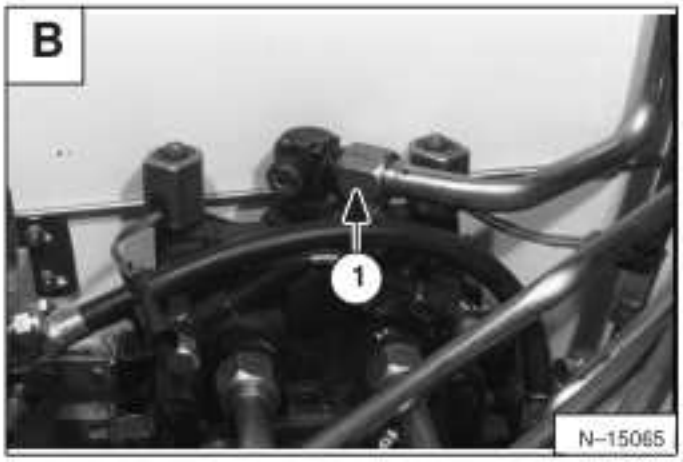
Disconnect the hose (Item 4) **[A]** from the lift arm by–pass control valve.

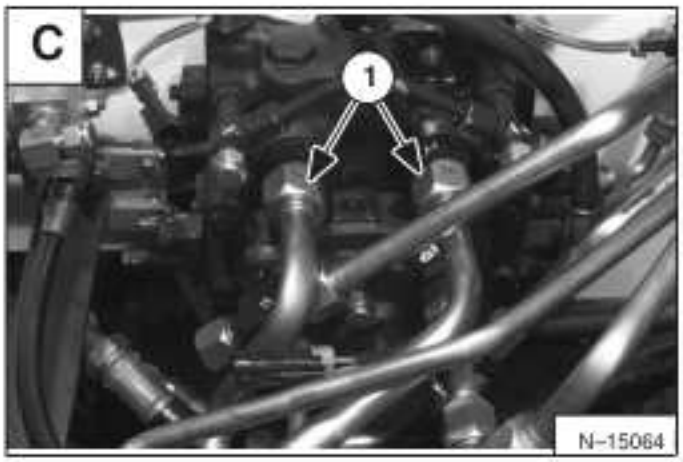
Disconnect the outlet tubeline (Item 1) **[B]** from the control valve.

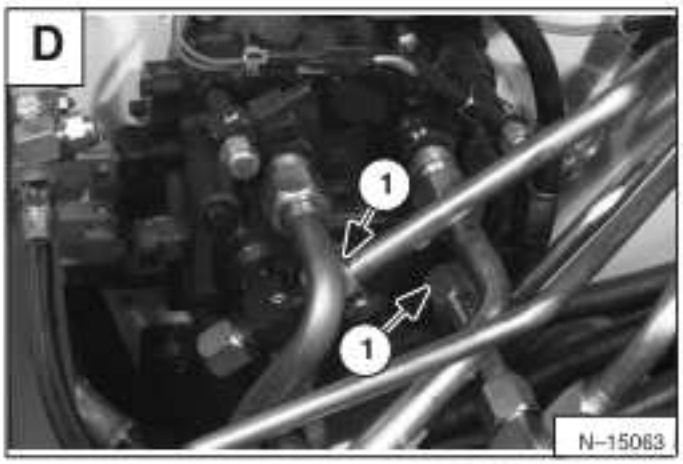
Disconnect both tubelines (Item 1) **[C]** from the auxiliary section of the control valve.

Disconnect the tilt tubelines (Item 1) **[D]**.









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HYDRAULIC/HYDROSTATIC FLUID SPECIFICATIONS

Specifications

Use Bobcat hydraulic/hydrostatic transmission fluid (P/N 6563328). If this fluid is not available, use 10W–30 or 10W–40 SAE Motor Oil (5W–30 for 0°F [–18°C] and Below).

DO NOT use automatic transmission fluids in the loader or permanent damage to the transmission will result.

⚠ WARNING

Diesel fuel or hydraulic fluid under pressure can penetrate skin or eyes, causing serious injury or death. Fluid leaks under pressure may not be visible. Use a piece of cardboard or wood to find leaks. Do not use your bare hand. Wear safety goggles. If fluid enters skin or eyes, get immediate medical attention from a physician familiar with this injury.

W–2072–0496

When temperatures below zero degree F (–18°C) are common, the loader must be kept in a warm building. Extra warm–up time must be used each time the loader is started during cold temperature conditions. Cold fluid will not flow easily and it makes action of the hydraulic function slower. Loss of fluid flow to the hydrostatic transmission pump (indicated by TRANS light ON) can cause transmission damage in less than 60 seconds.

⚠ WARNING

During cold weather 32°F (0°C) and below, do not operate machine until the engine has run for at least five (5) minutes at less than half throttle. This warm–up period is necessary for foot pedal operation and safe stopping. Do not operate controls during warm–up period. When temperatures are below –20°F (30°C), the hydrostatic oil must be heated or kept warm. The hydrostatic system will not get enough oil at low temperatures. Park the machine in an area where the temperature will be above 0°F (–18°C), if possible.

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Chart (Cont'd)

	SOLUTION
1.	Turn the key OFF, put the hand controller in neutral position, turn the key ON. (The engine does not have to be running for system recalibration or diagnostics).
2.	Check wire connections for loose connector body, loose or bent pins in connectors.
3.	Check for broken or damaged wire.
4.	Check for stuck or sticky handle controller mechanism.
5.	Turn the key OFF check to ensure spool moves freely, returns to neutral, turn the key ON.
6.	Check the signal voltage from the handle controller unit. (See Page 10–10)
7.	Check the signal voltage from the lift or tilt spool actuator. (See Page 10–8)
8.	Check to insure the actuator moves freely on the actuator mounting bolt.

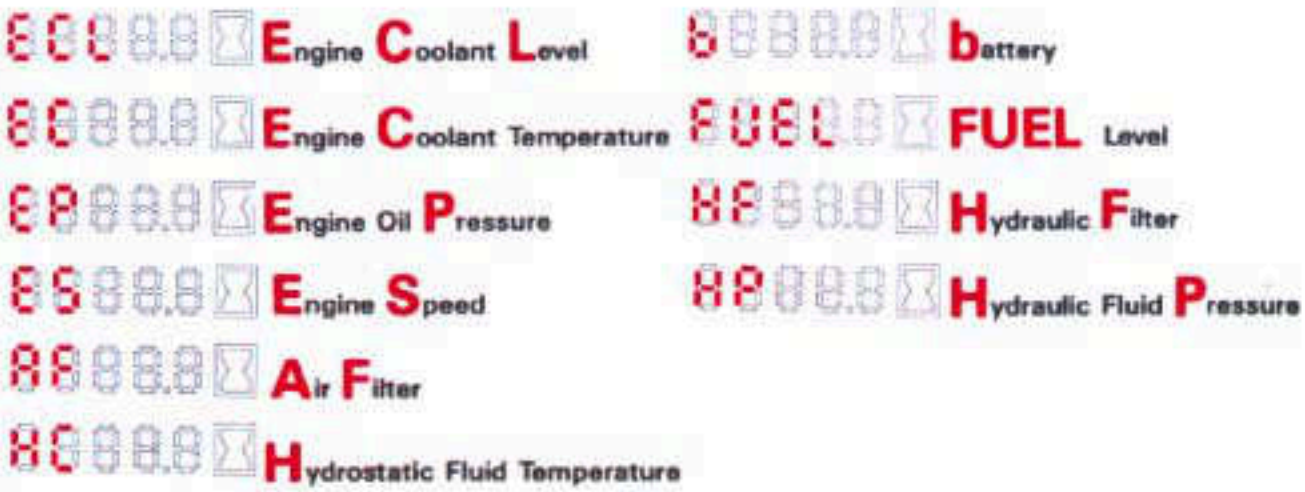
NOTE: If during operation one or both indicator light(s) goes out, this represents a reduced performance state. This is caused by the actuator not being able to reach (full stroke) as commanded by the handle controller. When the handle controller is returned to neutral and the actuator reaches neutral, the condition will clear itself and the light will come back ON. Reduced speed in the lift or tilt circuits may be noticed. This will not disable the loader, but may be an indication that an actuator is going bad.

When the wrong BICS™ controller, (Black face instead of Green face) is installed in an Advanced Hand Control loader, and the key is turned to the ON position, the left light will come on for 0.5 seconds and remain ON, then both lights will stay ON for an additional 0.5 seconds, then both lights will go out with no flashing code, because there is no signal from the BICS to the control module. The BICS™ controller lights will be ON, but the Advanced Hand Controller will not allow the loader hydraulics to function.

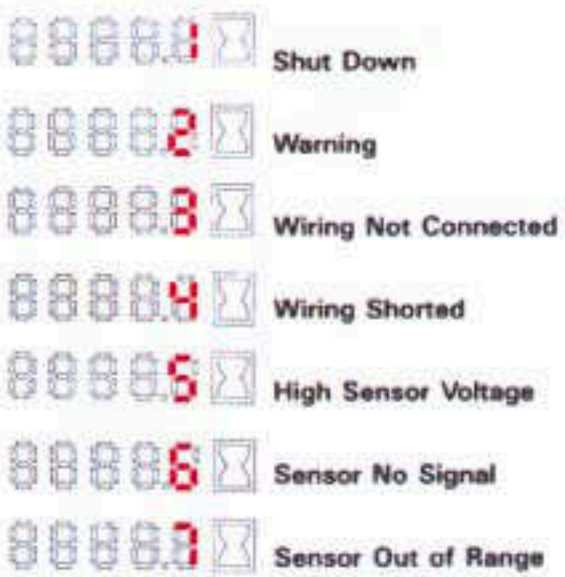
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MONITOR SERVICE CODES

One of the following Alphabetic Codes may appear on your monitor.



One of the following Numeric Codes will appear following one of the above Alphabetic Codes. Example: HP 3.2

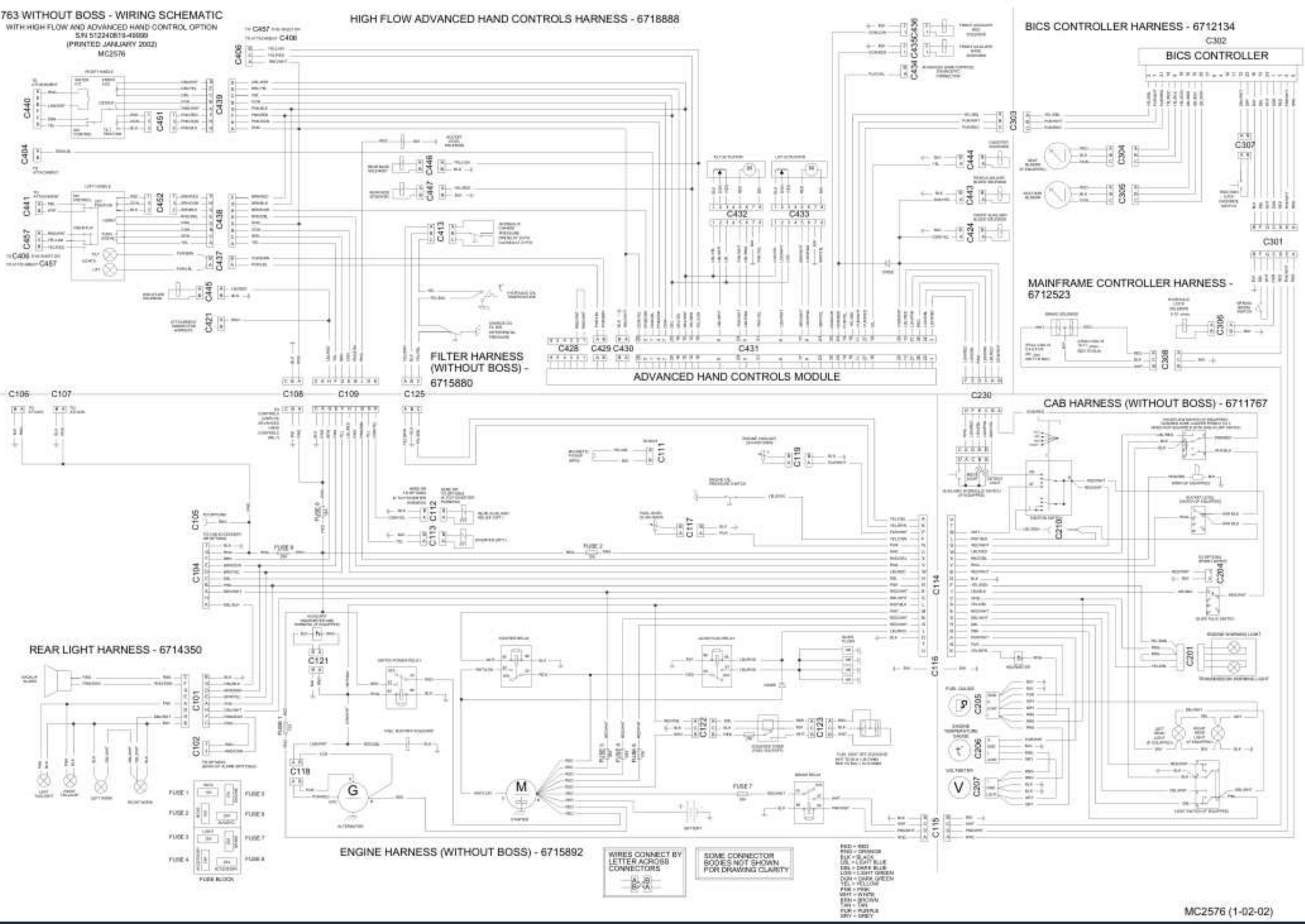


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