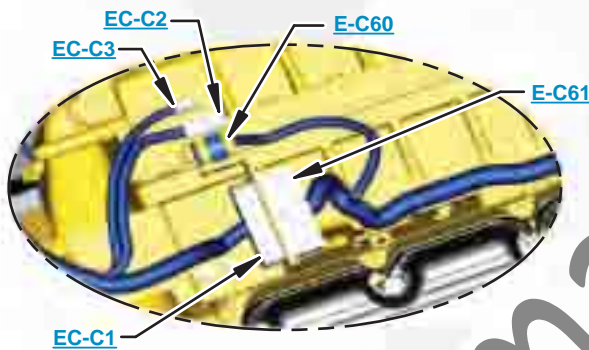


This document is best viewed at a screen resolution of 1024 X 768.

To set your screen resolution do the following:
RIGHT CLICK on the **DESKTOP**.
 Select **PROPERTIES**.
CLICK the **SETTINGS TAB**.
MOVE THE SLIDER under **SCREEN RESOLUTION** until it shows **1024 X 768**.
CLICK OK to apply the resolution.

The Bookmarks panel will allow you to quickly navigate to points of interest.



Click on any text that is BLUE and underlined. These are hyperlinks that can be used to navigate the schematic and machine views.

VIEW ALL CALLOUTS

When only one callout is showing on a machine view this button will make all of the callouts visible. This button is located in the top right corner of every machine view page.

HOTKEYS (Keyboard Shortcuts)		
	FUNCTION	KEYS
	Zoom In	"CTRL" / "+"
	Zoom Out	"CTRL" / "-"
	Fit to Page	"CTRL" / "0" (zero)
	Hand Tool	"SPACEBAR" (hold down)
	Find	"CTRL" / "F"



Schematic

769D Off-Highway Truck and 771D Quarry Truck Hydraulic System

BBB222-UP
BCA173-UP

SchematicCat.com

COMPONENT LOCATION

Page 1 of 2



Description	Part Number	Machine Location	Schematic Location
AirBreather(TorqueConverterandTransmission)	9C-4937	2	B-10
BrakeReleaseSectionoftheElectricDrivePump	209-3406	22	D-2,B-7,G-10
CylinderGP-Air/Hydraulic(FrontBrake)	8X-6987	37	H-7
CylinderGP-Hoist	4T-4168	3	D-8
CYLINDERGP-STEERING	110-0532	12	F-2
FilterGP-Hydraulic(ParkingBrakeRelease)	132-5448	19	G-8,H-2
FilterGP-Hydraulic(PowerTrain)	132-5447	18	B-11
FilterGP-Oil(Engine)	9Y-1911	21	B-8
HydraulicCaliperServiceBrake(Front)	8V-7374	13	F-5,H-5
OilCooler(RearBrake)	141-4109	29	F-11
Plate(Orifice)	8X-3572	4	D-8
PumpGP-Brake	159-4575	10	G-8,H-1
PumpGP-Hoist	159-4575	11	G-8
PUMPGP-METERING	192-4286	14	E-2
PUMPGP-PISTON	219-1964	15	G-8,C-2
PumpGP-TransmissionChargeSection	111-6841	7	A-12
PumpGP-TransmissionScavengeSection	111-6841	8	A-12
PUMPMOTORGP-PRELUBRICATION-QUICKEVAC	209-3406	31	B-6,G-10,D-1
Screen	8P-3795	5	A-11
Screen	8P-3795	9	A-13
Screen	6E-6640	30	F-10
SecondarySteeringSectionoftheElectricDrivePump	209-3406	23	D-2,B-7,G-10
ServiceandParkin Brake Rear	2A-7070	1	F-3,I-3,D-12,I-12
ValveGP-LoadSensing	175-7051	24	D-2,B-7,G-10
ValveGP-LockupClutchandSolenoid(TorqueConverter)	212-0394	17	B-12
ValveGP-PressureCompensator	219-1964	16	C-2
ValveGP-Relief(SecondarySteering-Main)	175-7051	25	D-2
ValveGp-Relief(TorqueConverterInlet)	9P-0673	6	A-10
ValveGP-Relief(TorqueConverterOutlet)	8P-1471	27	C-13
ValveGP-Shuttle(ResolverValve-Steering)	8J-6875	20	D-2
ValveGP-TractionControl	9G-9208	28	G-1

COMPONENT LOCATION

Page 2 of 2



Description	Part Number	Machine Location	Schematic Location
Air Breather (Hoist and Brake)	8X-4575	41	E-9
Cylinder GP-Air/Hydraulic (Rear Brake)	9P-0673	42	G-12
Filter GP-Hydraulic(Steering)	9T-5665	36	C-3
Filter GP-Steering Pump Case Drain	9T-0818	39	B-3
Oil Cooler (Power Train)	104-6220	35	C-12
Orifice Plate (Brake Cooling)	8X-8194	63	I-9
Power Train Electronic Control Module (ECM)	200-5375	60	C-1
Pressure Switch Assembly	9X-4455	62	D-2
Proportional Solenoid (Hoist – Lower)	194-1465	54	F-7
Proportional Solenoid (Hoist – Raise)	194-1465	52	E-7
Relief Valve (Vacuum Breaker)	212-0394	61	C-1
Screen	9T-9227	49	D-9
Screen	7J-3723	50	D-9
Slack Adjuster GP-Rear	2G-6535	26	F-12, G-3
SWITCH AS-PRESSURE (Steering Pump Oil)	3E-6450	56	D-3
Tank GP-Hydraulic (Hoist and Brake)	153-2739	48	D-9, D-10
Tank GP-Hydraulic(Steering)	170-8018	38	B-3
Tank GP-Makeup (Brake)	143-9426	55	I-11
Torque Converter Housing	128-2352	57	A-13
Transmission Housing	128-2352	59	A-11
Transmission Hydraulic Control	128-2352	58	B-11
Valve GP -Pressure Reducing(Steering)	175-7050	46	D-3
Valve GP-Brake (Parking and Secondary)	9T-4769	47	H-10
Valve GP-Check	123-5150	33	B-7
Valve GP-Check (Parking Brake Release)	138-4732	32	H-10, H-2
Valve GP-Check and Relief (Steering)	175-7050	43	D-2
Valve GP-Control(Hoist)	194-1465	51	E-6
Valve GP-Diverter(Towing)	3G-2887	40	G-10
Valve GP-Relief (Brake Oil Cooler)	194-1465	53	E-7
Valve GP-Relief (Primary Steering Backup)	175-7050	44	D-2
Valve GP-Relief Secondary Steering Backup	175-7050	45	D-2

TAP LOCATION



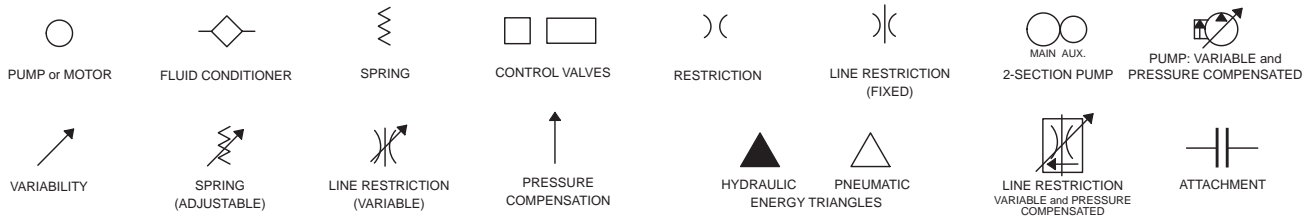
Tap Number	Description	Schematic Location
AA	Pressure Tap (Hoist)	G-8
BB	Pressure Tap (Lockup Clutch Maximum Pressure)	B-12
CC	Sampling Valve (Torque Converter Pressure)	C-11
DD	Oil Sampling Valve (Brake)	G-8, H-2
EE	Pressure Tap (Transmission Lubrication Pressure)	B-10
FF	Pressure Tap (Rear Brake Service)	F-12
GG	Pressure Tap (Torque Converter Pressure)	C-13
HH	Pressure Tap (Parking Brake)	D-12
JJ	Pressure Tap (Brake Cooling)	D-11
KK	Pressure Tap (Steering)	E-2
LL	Sampling Valve (Steering Oil)	B-3
MM	Pressure Tap (Hoist Cylinder - Head End)	D-8
NN	Pressure Tap (Hoist Cylinder - Head End)	D-8

Related Manuals	
Description	Media Number
Power Train	
Specifications	REN6507
Systems Operation	REN6508
Testing and Adjusting	REN6509
Disassembly and Assembly	SENR1574
Machine System	
Specifications: (Hydraulic System)	REN6515
Testing & Adjusting: (Hydraulic System)	REN6516
Specifications: (Steering System)	REN6510
Testing & Adjusting: (Steering System)	REN6511
Specifications: (Air System & Brakes)	REN6512
Testing & Adjusting: (Air System & Brakes)	REN6513
Specifications, Systems Operation, Testing & Adjusting: (Oil Evacuation System)	REN3391
Specifications, Systems Operation, Testing & Adjusting: (Suspension Cylinder)	REN6514
Electrical System	
Schematic: (Electrical System)	REN6518
Additional Manuals	
Automatic Electronic Traction Aid (AETA)	SENR2986

FLUID POWER SYMBOLS



BASIC COMPONENT SYMBOLS



VALVE ENVELOPES

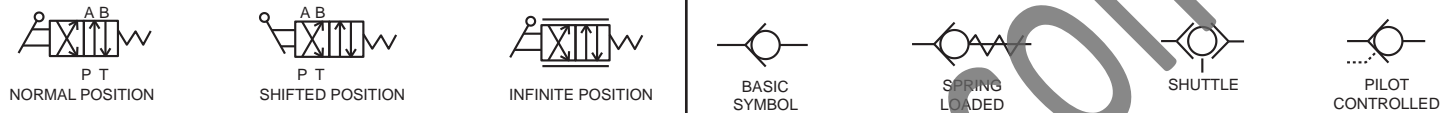
VALVES

VALVE PORTS



CONTROL VALVES

CHECK VALVES



FLUID STORAGE RESERVOIRS



MEASUREMENT

ROTATING SHAFTS



COMBINATION CONTROLS



MANUAL CONTROL SYMBOLS



RELEASED PRESSURE

PILOT CONTROL SYMBOLS

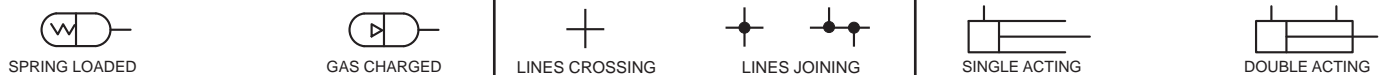
REMOTE SUPPLY PRESSURE



ACCUMULATORS

CROSSING AND JOINING LINES

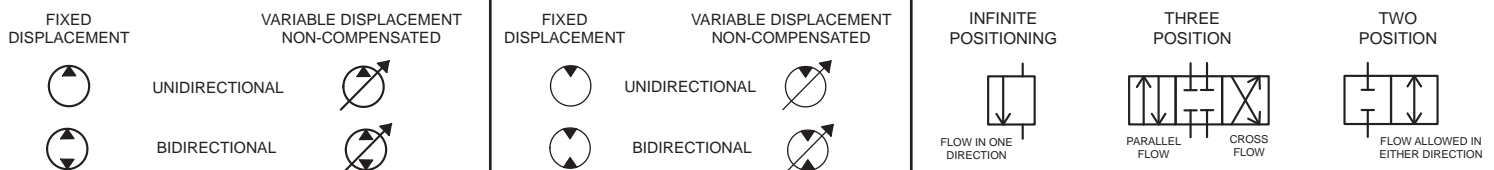
HYDRAULIC AND PNEUMATIC CYLINDERS



HYDRAULIC PUMPS

HYDRAULIC MOTORS

INTERNAL PASSAGEWAYS



ELECTRICAL SYMBOLS



Hydraulic Symbols (Electrical)



Transducer
(Fluid)



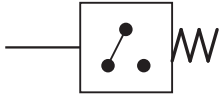
Transducer
(Gas / Air)



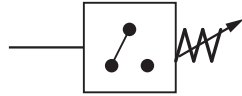
Generator



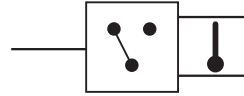
Electric Motor



Pressure Switch



Pressure Switch
(Adjustable)

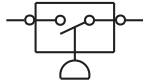


Temperature Switch

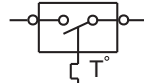


Electrical Wire

Electrical Symbols (Electrical)



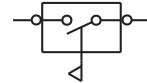
Pressure
Symbol



Temperature
Symbol



Level
Symbol

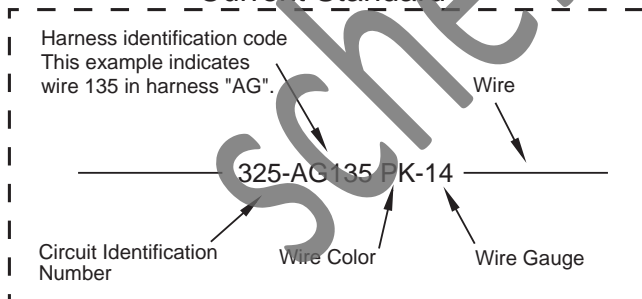


Flow
Symbol

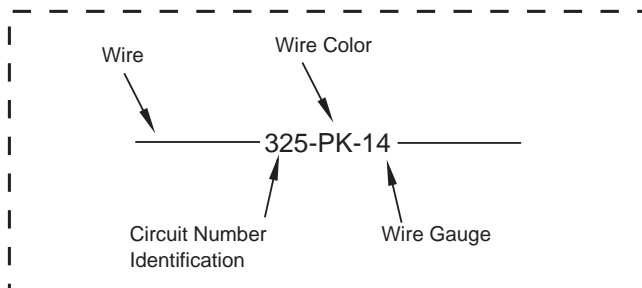
Wire Number Identification Codes

Electrical Schematic Example

Current Standard

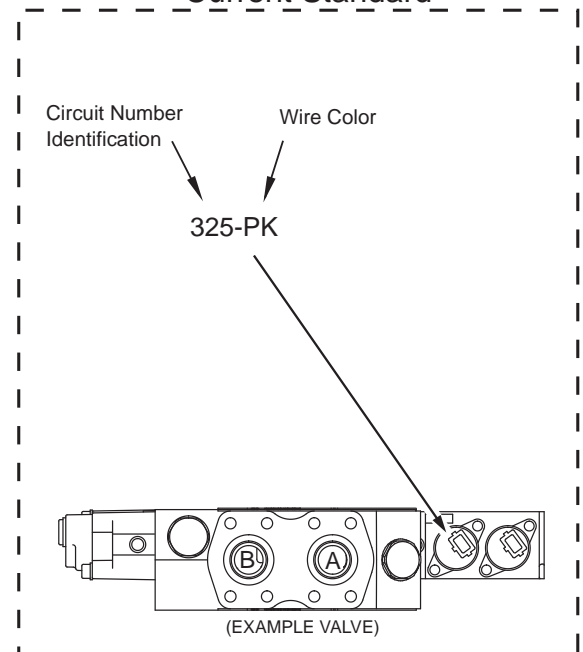


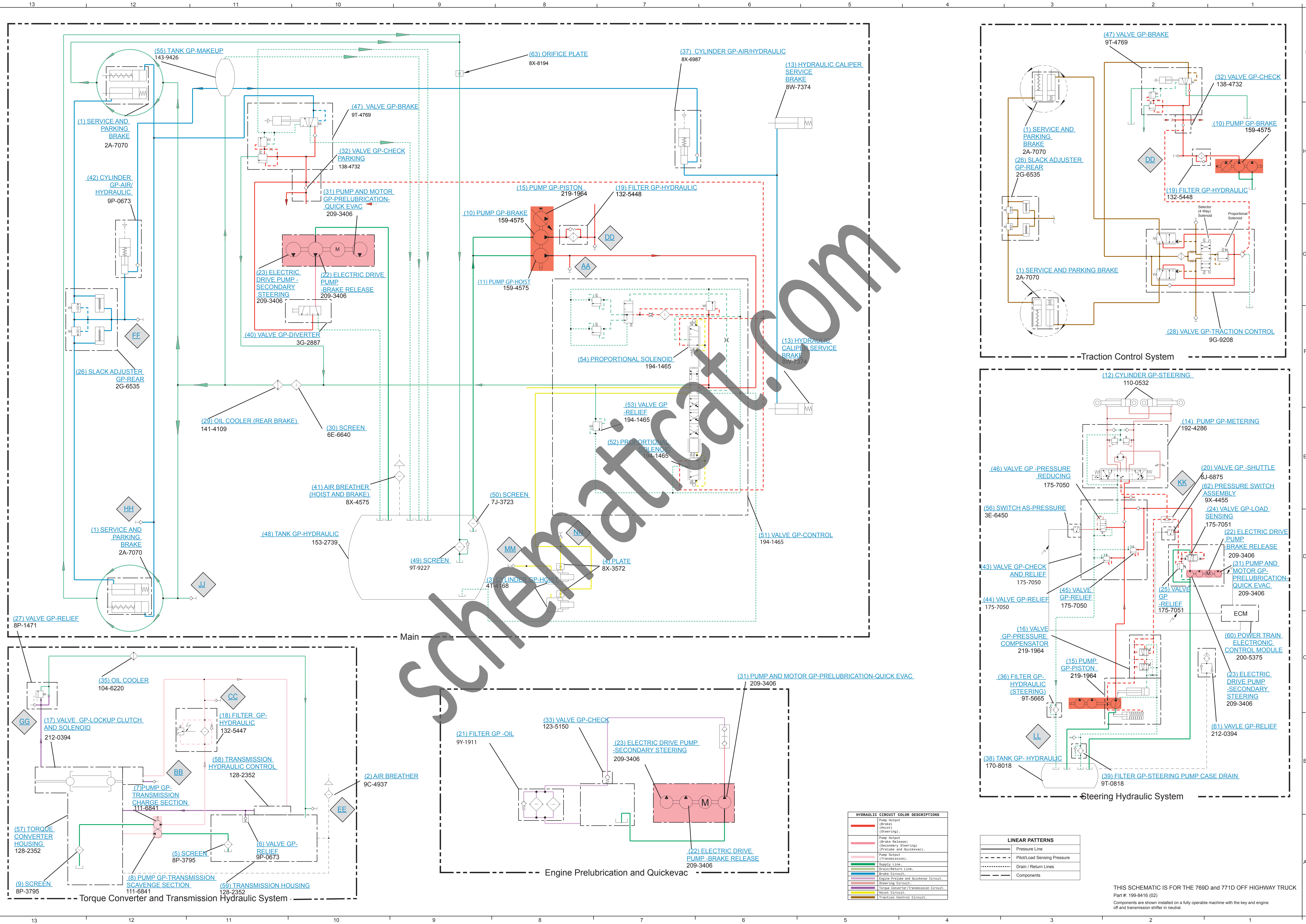
Previous Standard



Hydraulic Schematic Example

Current Standard





HYDRAULIC CIRCUIT COLOR DESCRIPTIONS

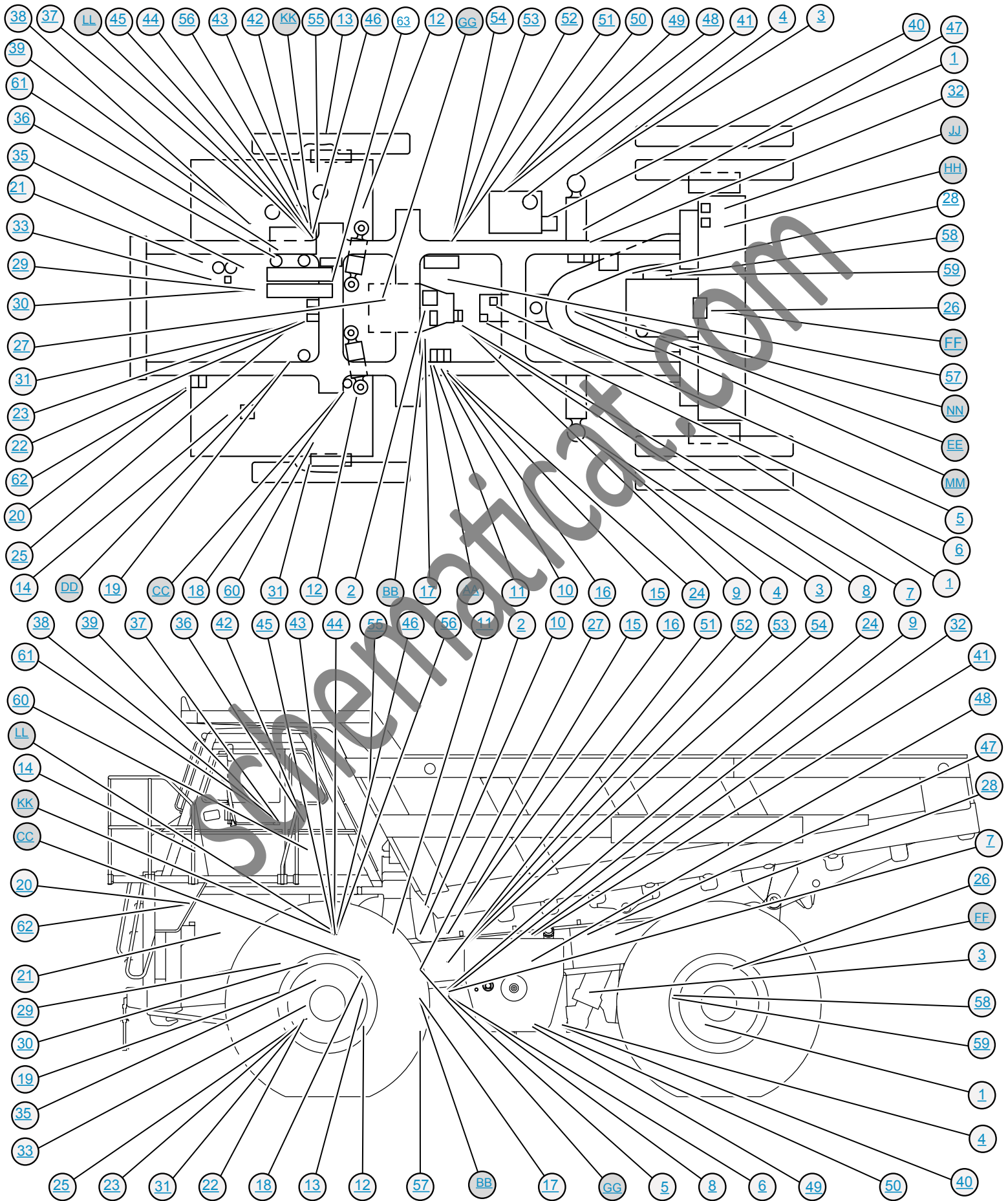
Red	Pump Output (Brake)
Blue	Pump Output (Hoist)
Green	Pump Output (Steering)
Orange	Pump Output (Brake Release)
Purple	Pump Output (Secondary Steering)
Light Blue	Pump Output (Pre-lube and Quickvac)
Light Green	Supply Line
Light Orange	Drain/Return Line
Light Purple	Brake Circuit
Light Blue	Engine Pre-lube and Quickvac Circuit
Light Green	Steering Circuit
Light Orange	Torque Converter/Transmission Circuit
Light Purple	Hoist Circuit
Light Blue	Traction Control Circuit

LINEAR PATTERNS

—	Pressure Line
- - -	Pilot/Load Sensing Pressure
· · · · ·	Drain / Return Lines
□	Components

THIS SCHEMATIC IS FOR THE 769D AND 771D OFF HIGHWAY TRUCK
 Part #: 199-8416 (02)
 Components are shown installed on a fully operable machine with the key and engine off and transmission shifter in neutral.

MACHINE COMPONENT LOCATION





HOIST CONTROL VALVE

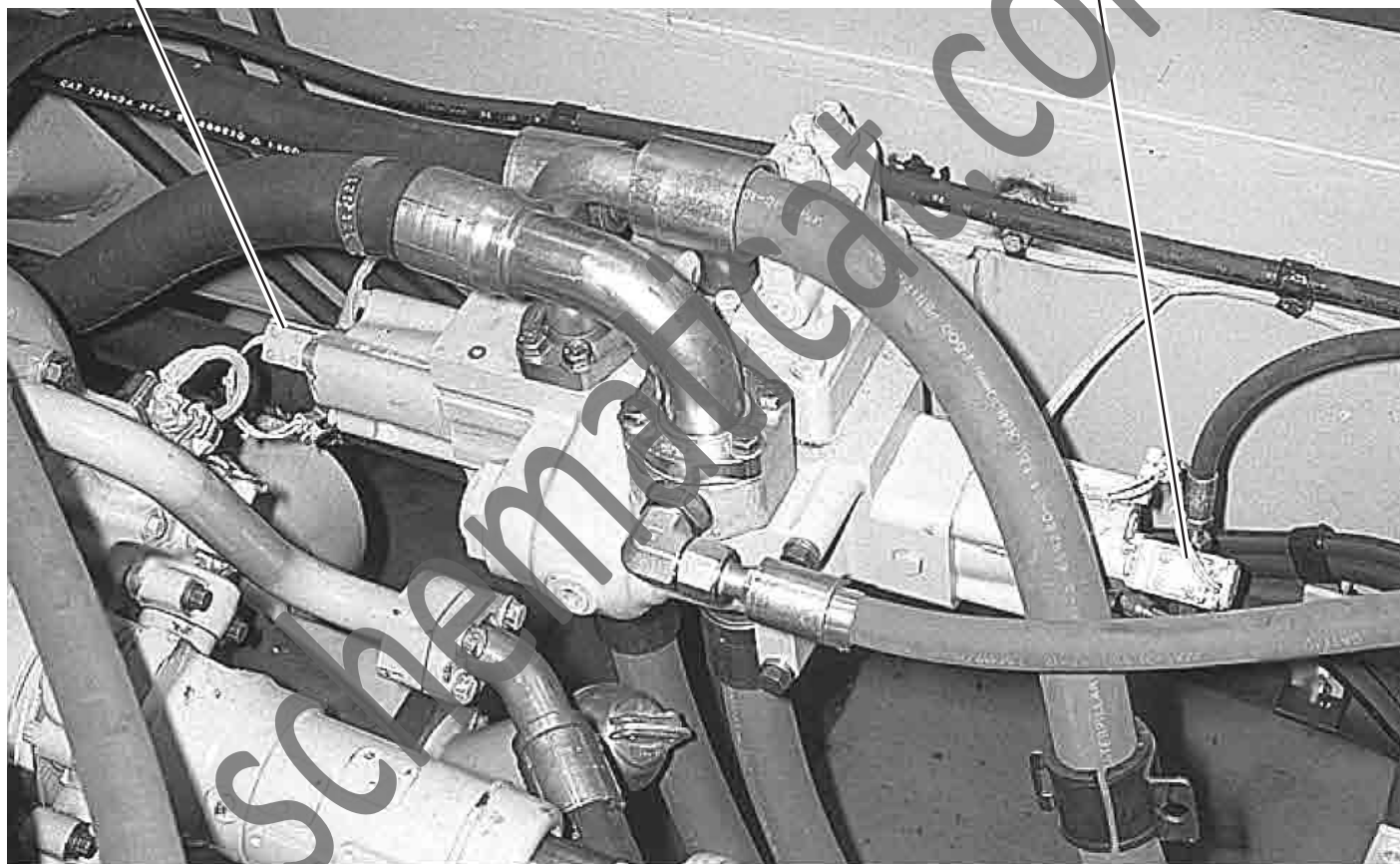


G705-GN
E790-PK

G704-YL
E790-PK

54

52



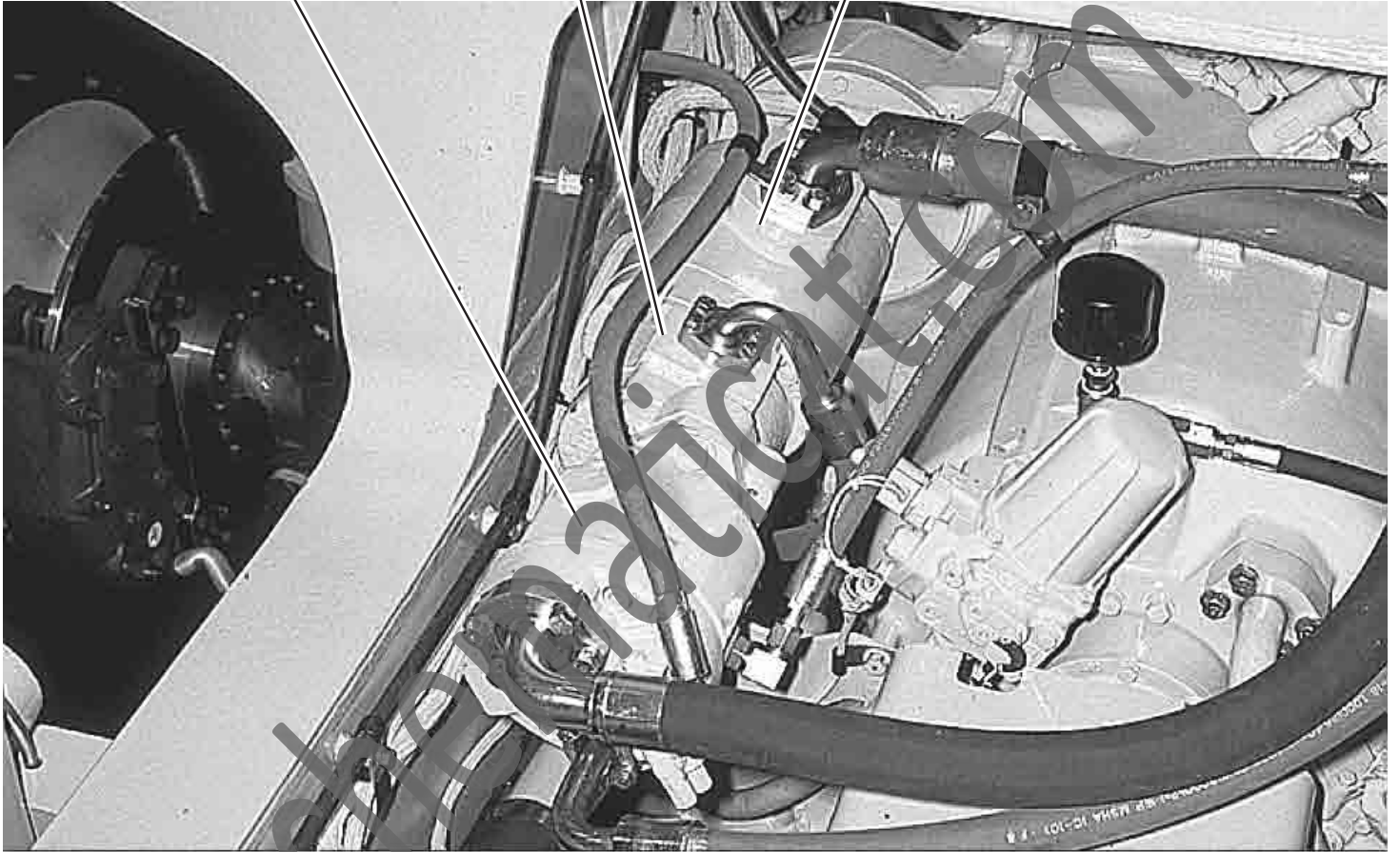
MAIN PUMP



15

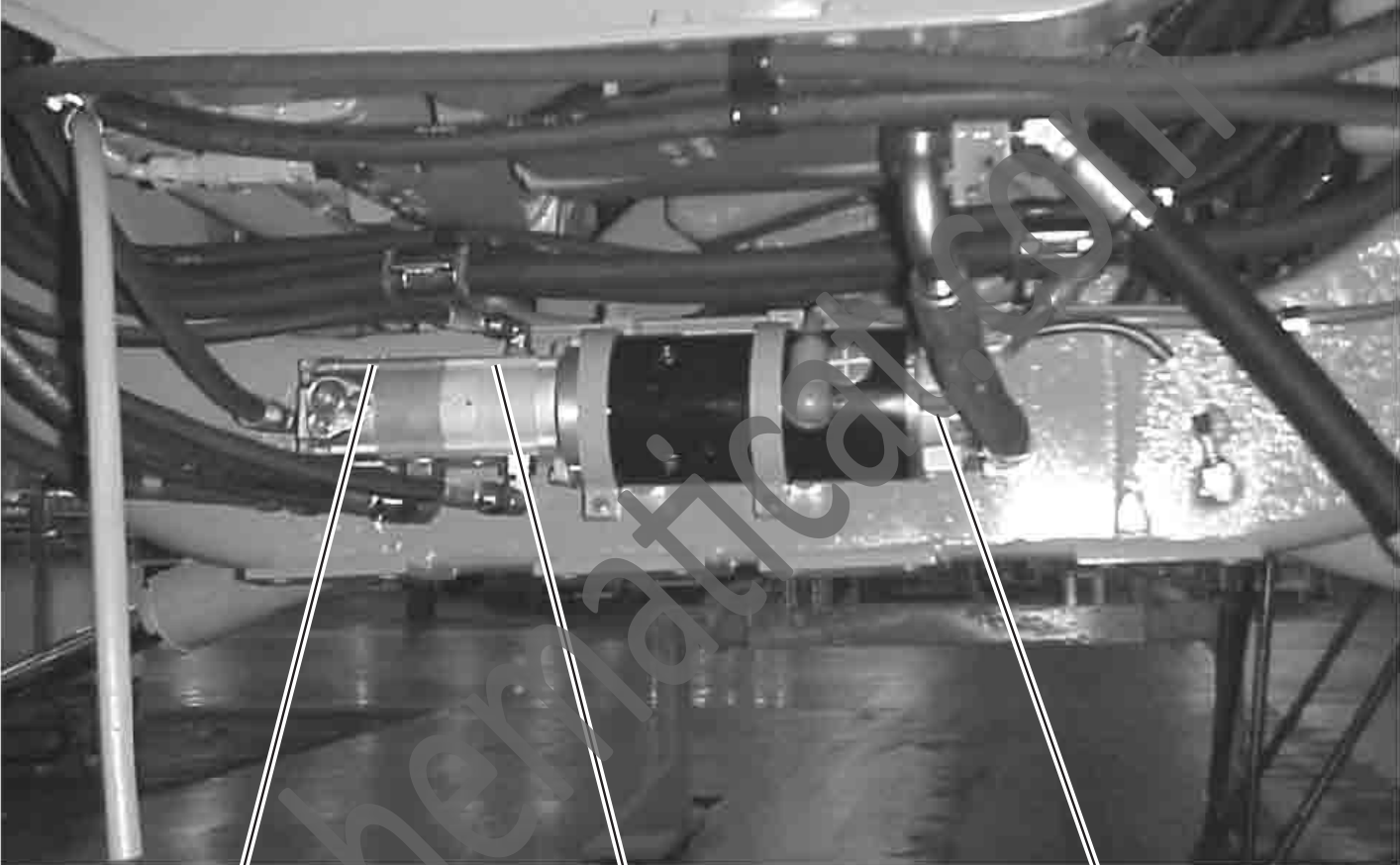
10

11



47





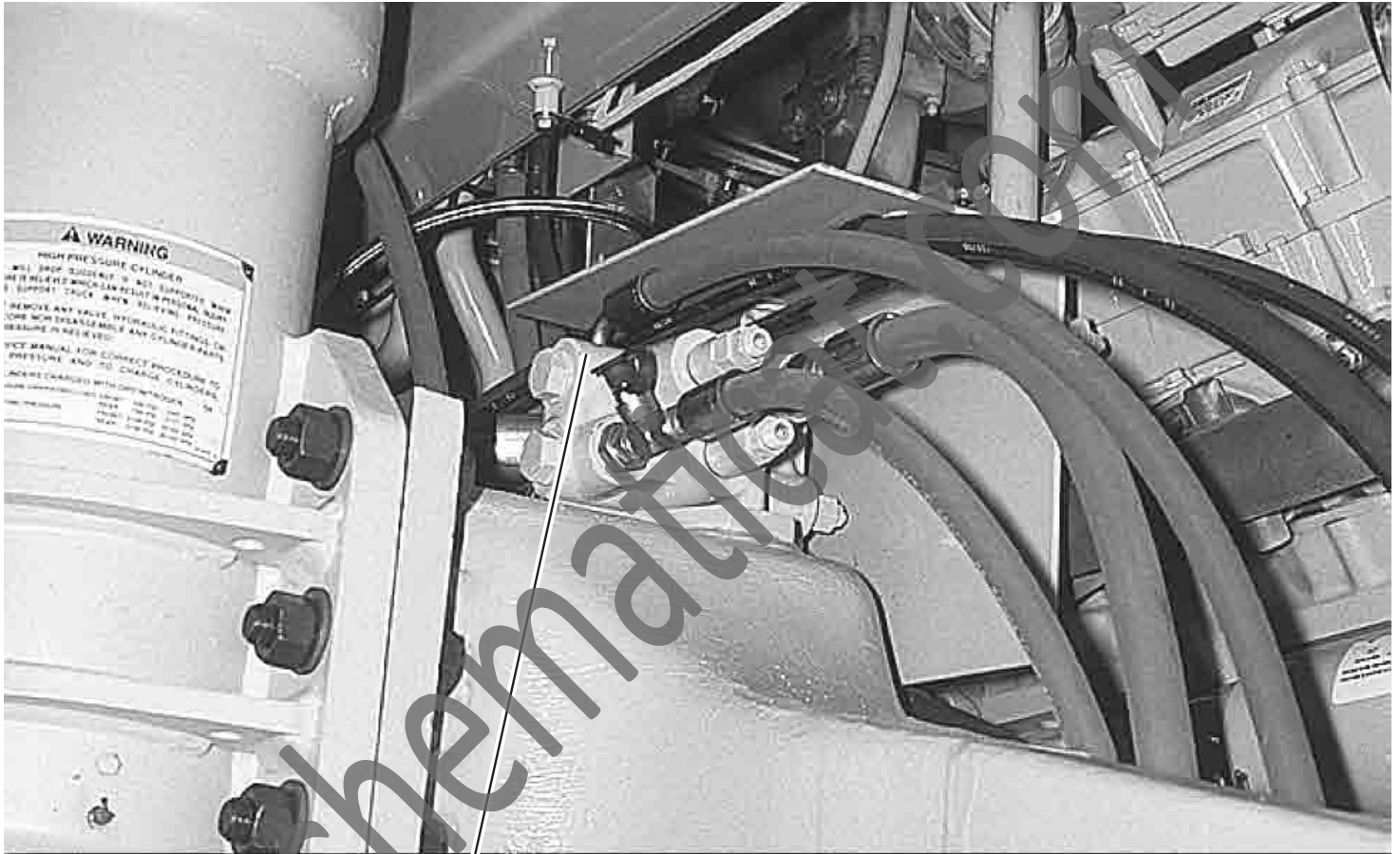
23

22

31



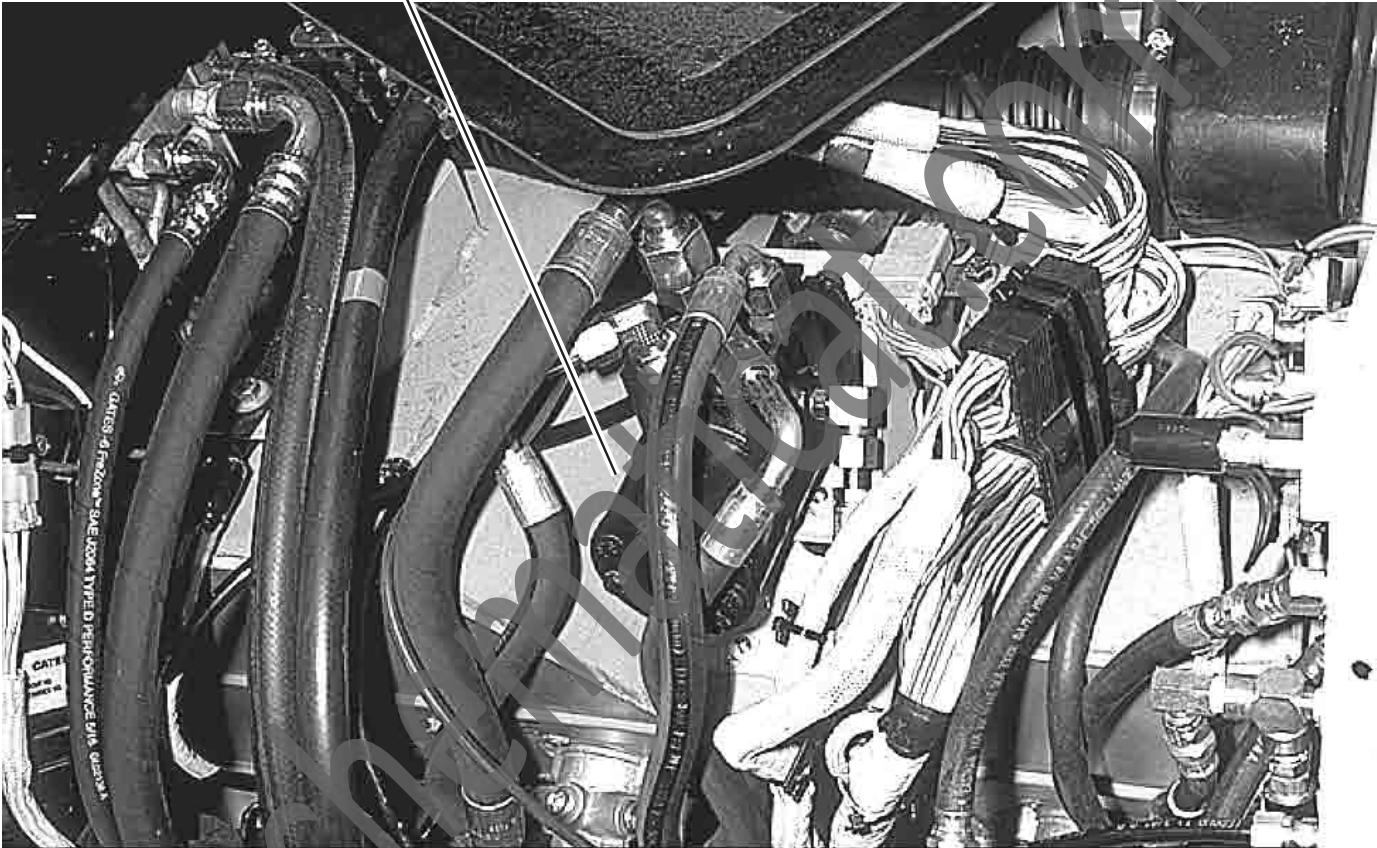
26



STEERING METERING PUMP



14



HOIST AND BRAKE HYDRAULIC TANK



STEERING HYDRAULIC TANK



TRACTION CONTROL VALVE



Proportional
Solenoid
Valve
773-GY
K952-BR

Selector Solenoid
(4 Way)
774-YL
K952-BR
775-BR
K952-BR

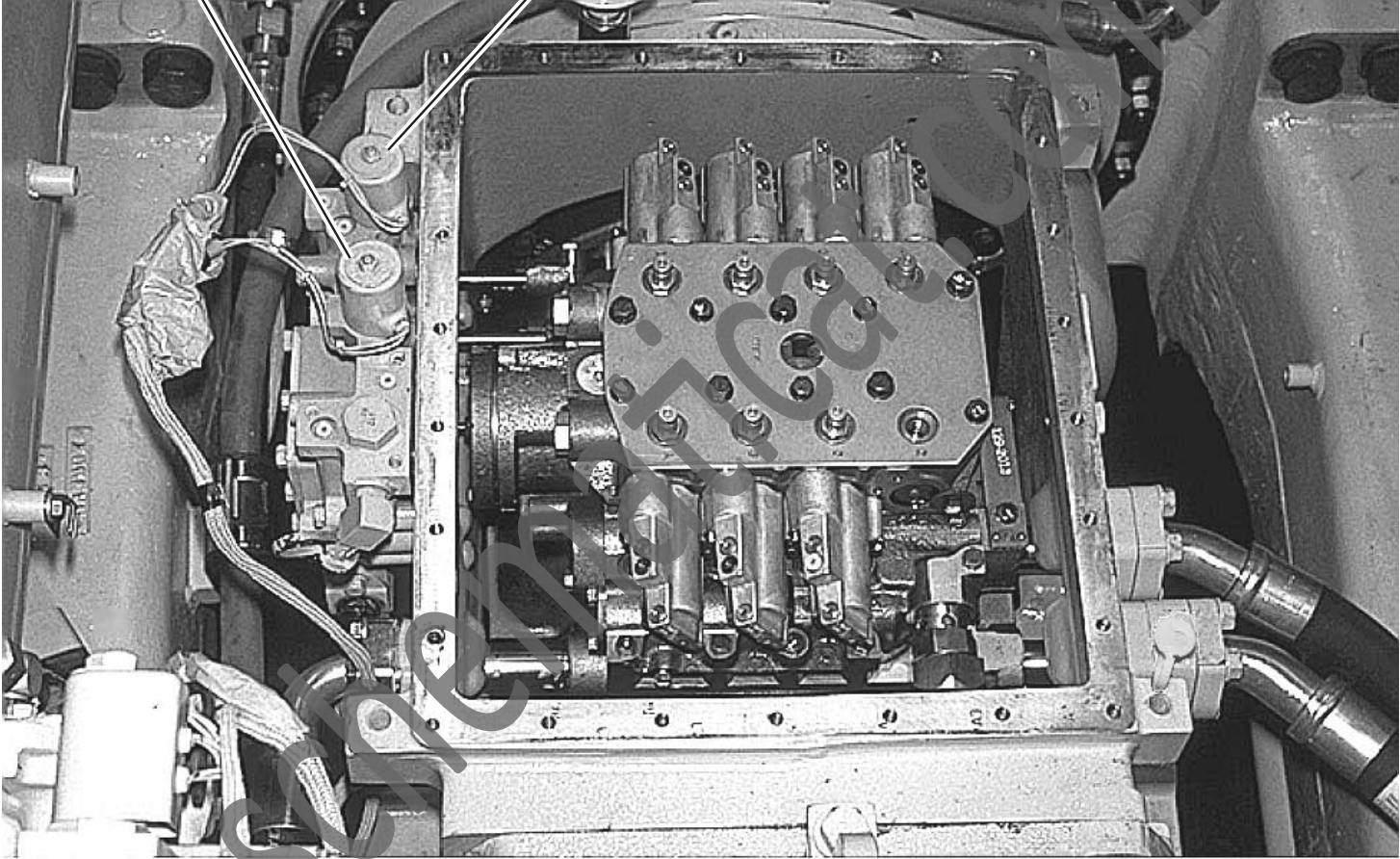


TRANSMISSION HYDRAULIC CONTROL



Downshift
Solenoid
704-GY
922-BR

Upshift
Solenoid
703-BU
922-BR



TRANSMISSION REAR VIEW



Lockup Clutch
Solenoid
705-PK
922-BR

