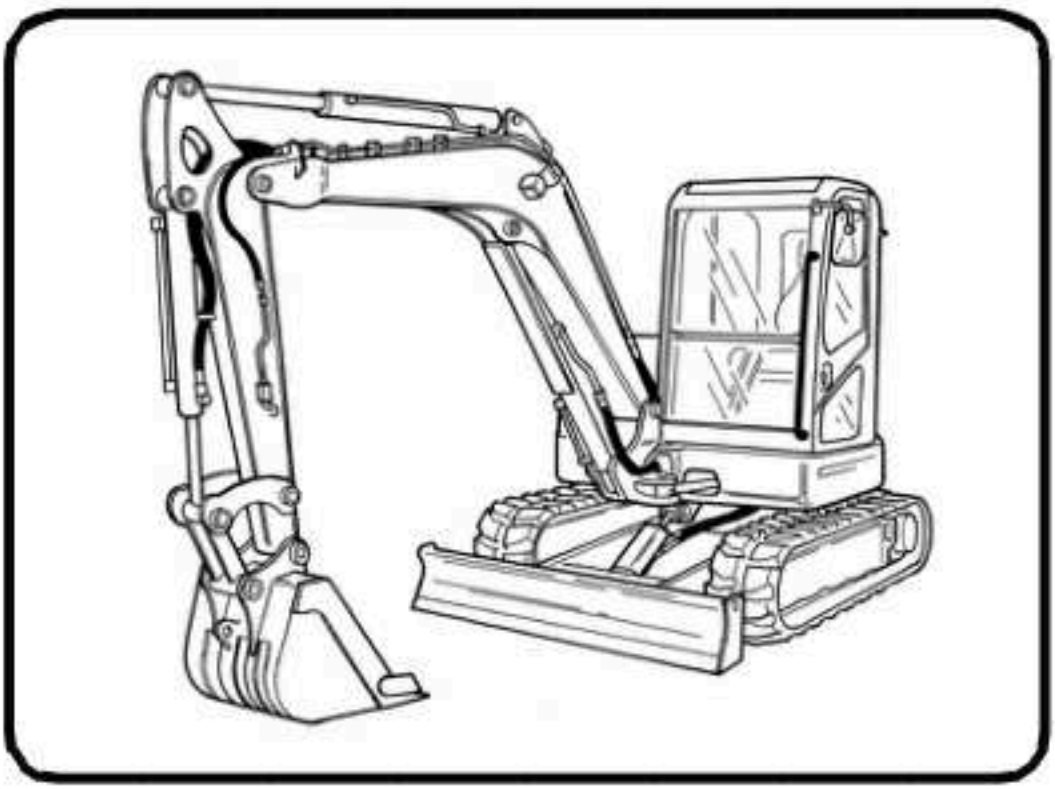
Bobcat®

Service Manual
E80 Excavator

S/N AETB11001 & Above
S/N AET311001 & Above



6987194 (2-11)

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FUEL TANK

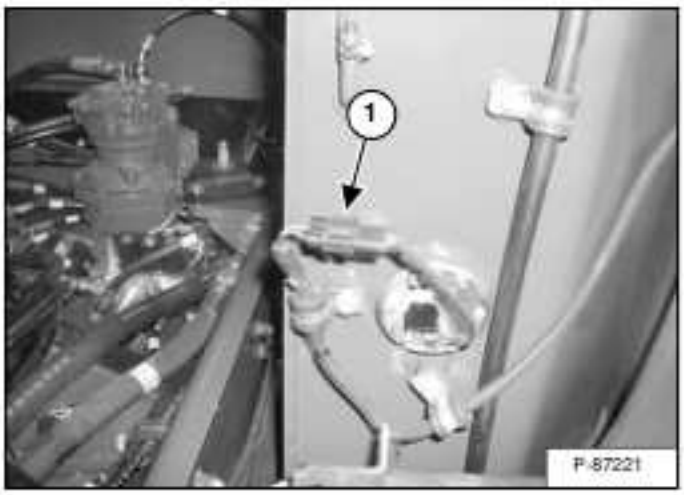
Removal And Installation

Remove the rear cover. (See Removal And Installation on Page 40-190-1.)

Drain the fuel tank.

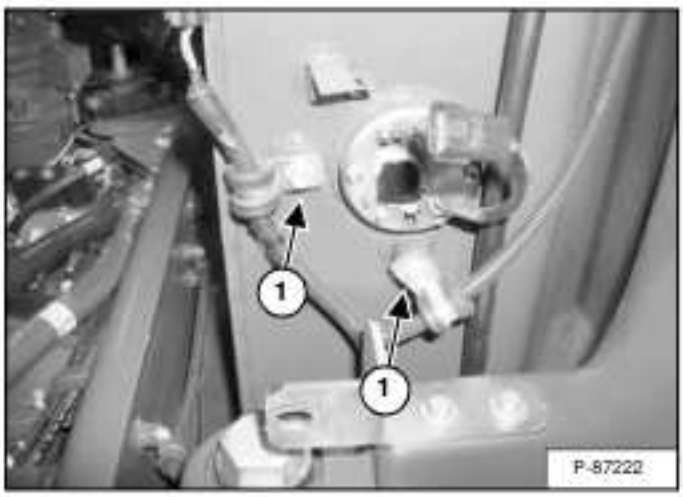
Open the right side cover.

Figure 40-110-1



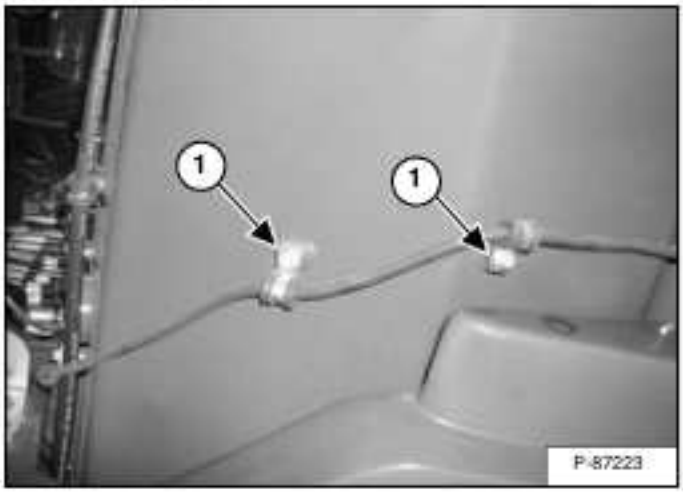
Disconnect the fuel sending unit wire harness (Item 1) **[Figure 40-110-1]**.

Figure 40-110-2



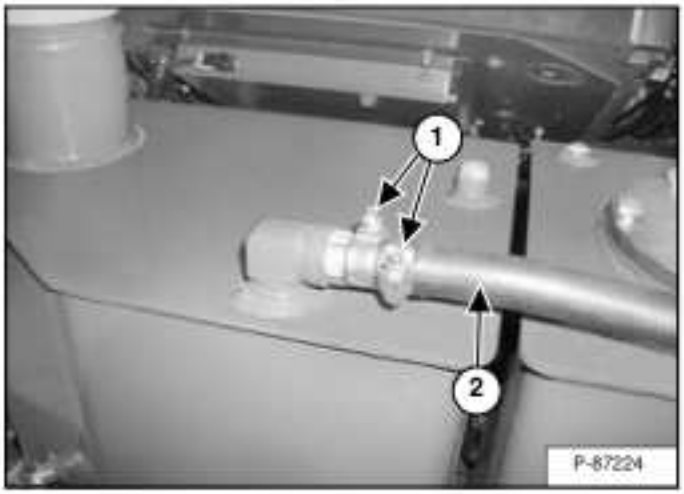
Remove the two bolts (Item 1) **[Figure 40-110-2]**.

Figure 40-110-3



Remove the bolts (Item 1) **[Figure 40-110-3]** and reposition the wire harness.

Figure 40-110-4



Loosen the hose clamps (Item 1) and remove the hose (Item 2) **[Figure 40-110-4]** from the top of the fuel tank.

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Specifications (Cont'd)

Valve Springs

Free Length	39,7 mm (1.5630 in)
Allowable Limit	39,2 mm (1.5433 in)
Inclination Allowable Limit	1,4 mm (0.0551 in)

Rocker Arm And Shaft

O.D. Of Rocker Arm Shaft	18,470 - 18,490 mm (0.7272 - 0.7280 in)
O.D. Of Rocker Arm Shaft Allowable Limit	18,44 mm (0.7260 in)
I.D. Of Rocker Arm	18,5 - 18,52 mm (0.7283 - 0.7291 in)
I.D. of Rocker Arm Allowable Limit	18,57 mm (0.7311 in)
Clearance Between Rocker Arm And Shaft	0,01 - 0,05 mm (0.0004 - 0.0020 in)
Clearance Between Rocker Arm & Shaft Allowable Limit	0,13 mm (0.0051 in)

Camshaft

Endplay	0,05 - 0,20 mm (0.0020 - 0.0079 in)
Endplay Allowable Limit	0,030 mm (0.0118 in)
Alignment (1/2 dial gauge reading)	0,0 - 0,02 mm (0.0 - 0.0008 in)
Alignment Allowable Limit	0,05 mm (0.0020 in)
Cam Lobe Height	43,4 - 43,6 mm (1.7087 - 1.7165 in)
Cam Lob Height Allowable Limit	50,65 mm (1.6988 in)
Gear End Bushing I.D.	49,99 - 50,055 mm (1.9681 - 1.9707 in)
Gear End Bushing I.D. Allowable Limit	50,13 mm (1.9736 in)
Gear End Camshaft O.D.	49,925 - 49,950 mm (1.9655 - 1.9665 in)
Gear End Camshaft O.D. Allowable Limit	49,890 mm (1.9642 in)
Gear End Oil Clearance	0,04 - 0,130 mm (0.0016 - 0.0051 in)
Gear End Oil Clearance Allowable Limit	0,240 mm (0.0094 in)
Intermediate Bore I.D.	50,0 - 50,025 mm (1.9685 - 1.9695 in)
Intermediate Bore I.D. Allowable Limit	50,1 mm (1.9724 in)
Intermediate Camshaft O.D.	49,91 - 49,935 mm (1.9650 - 1.9659 in)
Intermediate Camshaft O.D. Allowable Limit	49,875 mm (1.9636 in)
Intermediate Camshaft Oil Clearance	0,065 - 0,115 mm (0.0026 - 0.0045 in)
Flywheel End Inside Bore	50,0 - 50,025 mm (1.9685 - 1.9695 in)
Flywheel End Inside Bore Allowable Limit	50,1 mm (1.9724 in)
Flywheel End Camshaft O.D.	49,925 - 49,950 mm (1.9655 - 1.9665 in)
Flywheel End Camshaft O.D. Allowable Limit	49,890 mm (1.9642 in)
Flywheel End Oil Clearance	0,050 - 0,10 mm (0.0020 - 0.0039 in)
Flywheel End Oil Clearance Allowable Limit	0,210 mm (0.0083 in)

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Gauge Pressure Related Troubleshooting (Cont'd)

High Pressure Over 590 kPa (5,9 bar) (85 psi) Low Pressure Approximately 760 mm Hg (29.9 In HG) (Negative Pressure)	
Turn on air conditioning, set blower switch to high, turn air conditioner OFF and wait 10 minutes. Re-check High / Low pressure readings. High Pressure 1280 - 1860 kPa (12,8 - 18,6 bar) (185 - 270 psi) Low Pressure 140 - 320 kPa (1,4 - 3,2 bar) (21 - 47 psi)	
POSSIBLE CAUSE	**SOLUTION**
Moisture in system	Recover refrigerant and replace receiver dryer
Contaminated system	Recover refrigerant and replace evaporator core assembly

High Pressure 590 - 1770 kPa (5,9 - 17,7 bar) (85 - 256 psi) Low Pressure 500 mm Hg (19.7 in Hg) (Negative Pressure)	
POSSIBLE CAUSE	**SOLUTION**
Moisture in the system has iced up the expansion valve	Recover refrigerant, replace receiver / dryer, vacuum and recharge the system

High Pressure Over 2120 - 2260 kPa (21,2 - 22,6 bar) (313 - 327 psi) Low Pressure 250 kPa (2,5 bar) (36 psi)		
POSSIBLE CAUSE	**INSPECTION**	**SOLUTION**
Refrigerant pressure problem due to defective expansion valve or temperature sensor	Inspect whether the temperature sensor is installed correctly	Install temperature sensor correctly, replace expansion valve.

High Pressure over 690 - 1080 kPa (6,9 - 10,8 bar) (100 - 156 psi) Low Pressure 390 - 590 kPa (3,9 - 5,9 bar) (57 - 85 psi)	
POSSIBLE CAUSE	**SOLUTION**
Low pressure due to poor compressor performance	Inspect and replace compressor if necessary

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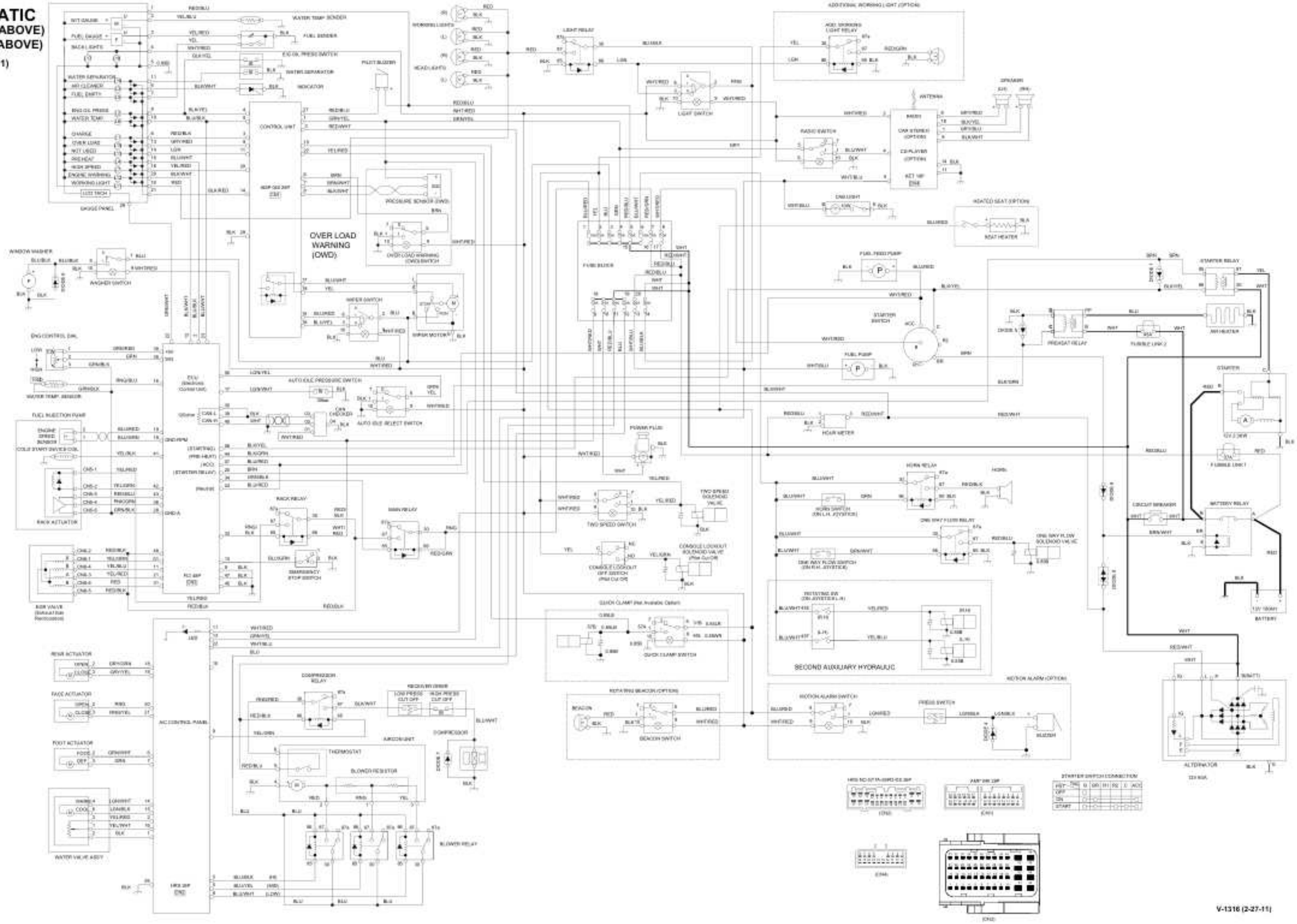
WIRING SCHEMATIC

E80 (S/N AETB11001 AND ABOVE)
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V-1316

BLK = BLACK
BLU = BLUE
BRN = BROWN
DBL = DARK BLUE
DGN = DARK GREEN
GRN = GREEN
GRY = GRAY
LBL = LIGHT BLUE
LGN = LIGHT GREEN
PNK = PINK
PUR = PURPLE
RED = RED
ORG = ORANGE
TAN = TAN
WHT = WHITE
YEL = YELLOW



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