




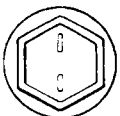
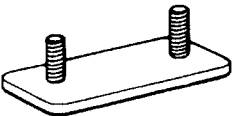



# STANDARD BOLT TIGHTENING TORQUE

	Page
STANDARD BOLT TIGHTENING TORQUE .....	B-2

# STANDARD BOLT TIGHTENING TORQUE

## HOW TO DETERMINE BOLT STRENGTH

	Mark	Class		Mark	Class
Hexagon head bolt	 Bolt head No. 4 — 5T 6 — 6T 7 — 7T	4T	Stud bolt	 No mark	4T
Hexagon flange bolt w/washer hexagon bolt	 No mark	4T		 Grooved	6T
Hexagon head bolt	 Two protruding lines	5T			
Hexagon flange bolt w/washer hexagon bolt	 Two protruding lines	6T	Welded bolt		4T
Hexagon head bolt	 Three protruding lines	7T			

## SPECIFIED TORQUE FOR STANDARD BOLTS

Class	Diameter mm	Pitch mm	Tightening torque					
			Hexagon head bolt			Hexagon flange bolt		
			kg-cm	ft-lb	N·m	kg-cm	ft-lb	N·m
4T	6	1	55	48 in.-lb	5.4	60	52 in.-lb	5.9
	8	1.25	130	9	13	145	10	14
	10	1.25	260	19	25	290	21	28
	12	1.25	480	35	47	540	39	53
	14	1.5	760	55	75	850	61	83
	16	1.5	1,150	83	113			
5T	6	1	65	56 in.-lb	6.4			
	8	1.25	160	12	16			
	10	1.25	330	24	32			
	12	1.25	600	43	59			
	14	1.5	930	67	91			
	16	1.5	1,400	101	137			
6T	6	1	80	69 in.-lb	7.8	90	78 in.-lb	8.8
	8	1.25	195	14	19	215	16	21
	10	1.25	400	29	39	440	32	43
	12	1.25	730	53	72	810	59	79
	14	1.5				1,250	90	123
7T	6	1	110	8	11	120	9	12
	8	1.25	260	19	25	290	21	28
	10	1.25	530	38	52	590	43	58
	12	1.25	970	70	95	1,050	76	103
	14	1.5	1,500	108	147	1,700	123	167
	16	1.5	2,300	166	226			


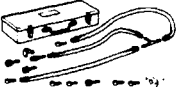


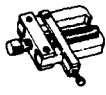

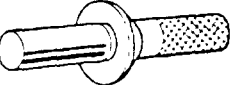
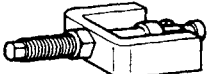





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# SST AND SSM

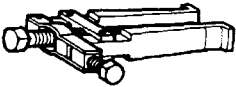


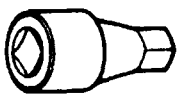


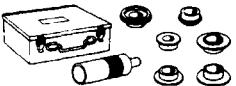





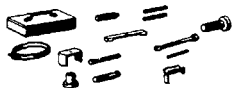
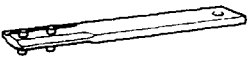
	Page
SST (SPECIAL SERVICE TOOLS) .....	C-2
SSM (SPECIAL SERVICE MATERIALS) .....	C-9

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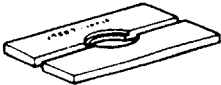



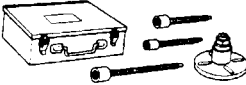

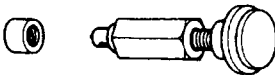



## SST (SPECIAL SERVICE TOOLS) (Cont'd)

Section			EM	EC	FI	FU	LU	ST	CH	CL	MT	AT	TF	PR	FA	RA	BR	SR	BO	WI
Illustration	Part No.	Part Name																		
	09258-14010	(Air Pump Tester)		●																
	09268-41045	(Injection Measuring Tool Set)			●															
	09268-45011	(EFI Fuel Pressure Gauge)			●															
	09285-76010	(Injection Camshaft Bearing Cone Replacer)						●	●											
	09286-46011	(Injection Pump Spline Shaft puller)						●	●											●
	09301-20020	(Clutch Guide Tool)								●										
	09302-30031	(Clutch Diaphragm Spring Hight No. 3 Gauge)								●										
	09303-35011	(Input Shaft Front Bearing Puller)								●										
	09304-30012	(Input Shaft Front Bearing Replacer)								●										
	09305-20012	(Gear Shift Lever Remover)											●							
	09307-12010	(Extension Housing Bushing Replacer)																●		
	09307-30010	(Extension Housing Bushing Replacer)									●									
	09308-00010	(Oil Seal Puller)									●	●	●		●	●		●		

## SST (SPECIAL SERVICE TOOLS) (Cont'd)

Section			EM	EC	FI	FU	LU	ST	CH	CL	MT	AT	TF	PR	FA	RA	BR	SR	BO	WI
Illustration	Part No.	Part Name																		
	09308-10010	(Oil Seal Puller)									●	●				●				
	09310-35010	(Countershaft Bearing Replacer)											●							
	09312-20011	(Transmission Gear Remover & Replacer)									●									
	09313-30021	(Detent Ball Plug Socket)									●		●							●
	09315-00010	(Clutch Release Bearing Remover & Replacer)								●										
	09315-00021	(Clutch Release Bearing Remover & Replacer)								●										
	09316-60010	(Transmission & Transfer Bearing Replacer)									●		●							
	09325-12010	(Transmission Oil Plug)									●									
	09325-20010	(Transmission Oil Plug)	●								●	●	●	●						
	09330-00020	(Companion Flange Holding Tool)											●	●		●				
	09332-25010	(Universal Joint Bearing Remover & Replacer)												●						
	09333-00012	(Clutch Diaphragm Spring Aligner)								●										
	09350-20013	(TOYOTA Automatic Transmission Tool Set)										●								
	09504-00011	(Differential Side Bearing Adjusting Nut Wrench)														●				

## SST (SPECIAL SERVICE TOOLS) (Cont'd)




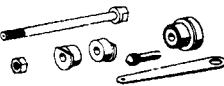





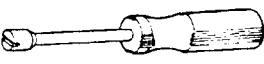

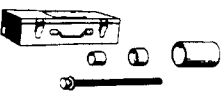
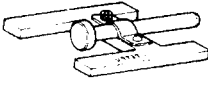

Section			EM	EC	FI	FU	LU	ST	CH	CL	MT	AT	TF	PR	FA	RA	BR	SR	BO	WI
Illustration	Part No.	Part Name																		
	09506-30011	(Differential Drive Pinion Bearing Cone Replacer)														●				
	09506-35010	(Differential Drive Pinion Rear Bearing Replacer)									●									
	09515-30010	(Rear Wheel Bearing Replacer)														●				
	09521-25011	(Rear Axle Shaft Puller)														●				
	09527-10010	(Rear Axle Shaft Bearing Remover)													●					
	09527-20011	(Rear Axle Shaft Bearing Remover)																●		
	09554-30011	(Differential Oil Seal Replacer)														●				
	09556-30010	(Drive Pinion Front Bearing Remover)														●				
	09557-22022	(Companion Flange Remover & Replacer)												●		●				
	09605-60010	(Steering Knuckle Bearing Cup Replacer)													●					
	09606-60020	(Steering Knuckle Bearing Cup Remover)													●					
	09607-60020	(Front Wheel Adjusting Nut Wrench)													●					
	09608-20011	(Front Hub & Drive Pinion Bearing Tool Set)									●									
	09608-30011	(Front Hub & Drive Pinion Bearing Tool Set)													●	●		●		




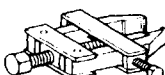





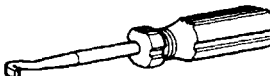
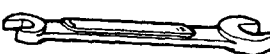




## SST (SPECIAL SERVICE TOOLS) (Cont'd)

Section			EM	EC	FI	FU	LU	ST	CH	CL	MT	AT	TF	PR	FA	RA	BR	SR	BO	WI
Illustration	Part No.	Part Name																		
	09608-35013	(Axle Hub & Drive Pinion Bearing Tool Set)									●				●	●		●		
	09609-20011	(Steering Wheel Puller)																●		
	09610-55012	(Pitman Arm Puller)																●		
	09611-12010	(Tie Rod End Puller)																●		
	09611-22012	(Tie Rod End Puller)													●			●		
	09612-22011	(Tilt Handle Bearing Replacer)																●		
	09612-30012	(Steering Worm Bearing Puller)										●						●		
	09612-65013	(Steering Worm Bearing Puller)													●			●		
	09616-00010	(Steering Worm Bearing Adjusting Socket)																●		
	09616-22010	(Steering Worm Bearing Adjusting Screw Wrench)																●		
	09617-30040	(Worm Bearing Adjusting Screw Lock Nut Wrench)																●		
	09618-60010	(Front Axle & Drive Shaft Bearing Replacer)													●					
	09620-30010	(Steering Gear Box Replacer Set)																●		
	09628-62011	(Ball Joint Puller)													●			●		

## SST (SPECIAL SERVICE TOOLS) (Cont'd)

Section			EM	EC	FI	FU	LU	ST	CH	CL	MT	AT	TF	PR	FA	RA	BR	SR	BO	WI
Illustration	Part No.	Part Name																		
	09630-00011	(Power Steering Gear Housing Overhaul Tool Set)																●		
	09631-22020	(Power Steering Hose Nut 14 x 17 Wrench)																●		
	09631-60010	(Power Steering Gear Housing Bearing Replacer)																●		
	09634-60013	(Steering Knuckle Centering Gauge)													●					
	09636-20010	(Upper Ball Joint Dust Cover Replacer)																●		
	09703-30010	(Brake Shoe Return Spring Tool)															●			
	09709-29017	(LSPV Gauge Set)															●			
	09710-30020	(Suspension Bushing Tool Set)													●					
	09717-20010	(Brake Shoe Return Spring Remover)															●			
	09718-00010	(Shoe Hold Down Spring Driver)															●			
	09718-20010	(Brake Shoe Return Spring Replacer)															●			
	09726-35010	(Front Lower Arm Bushing Remover & Replacer)													●	●				
	09737-00010	(Brake Booster Push Rod Gauge)															●			
	09751-36011	(Brake Tube Union Nut 10 x 12 Wrench)								●					●		●			

# SST (SPECIAL SERVICE TOOLS) (Cont'd)

Section			EM	EC	FI	FU	LU	ST	CH	CL	MT	AT	TF	PR	FA	RA	BR	SR	BO	WI
Illustration	Part No.	Part Name																		
	09812-00010	(Door Hinge Set Bolt Wrench Set)																	●	
	09820-00020	(Alternator Bearing Puller)							●											
	09820-63010	(Alternator Pulley Set Nut Wrench Set)							●											
	09842-14010	(Idle Adjusting Wiring Harness)			●															
	09842-30020	(Wiring "C" EFI Inspection)			●															
	09842-30050	(Wiring "A" EFI Inspection)			●															
	09860-11011	(Carburetor Drive Set)				●														
	09921-00010	(Spring Tension Tool)									●	●	●							
	09922-00010	(Wrench 5 x 12)				●														
	09923-00010	(Hexagon Wrench)									●									
	09950-00020	(Bearing Remover)									●		●			●				
	09950-20015	(Universal Puller)									●		●		●	●				
	09992-00093	(Oil Pressure Gauge Set)										●								

## SSM (SPECIAL SERVICE MATERIALS)

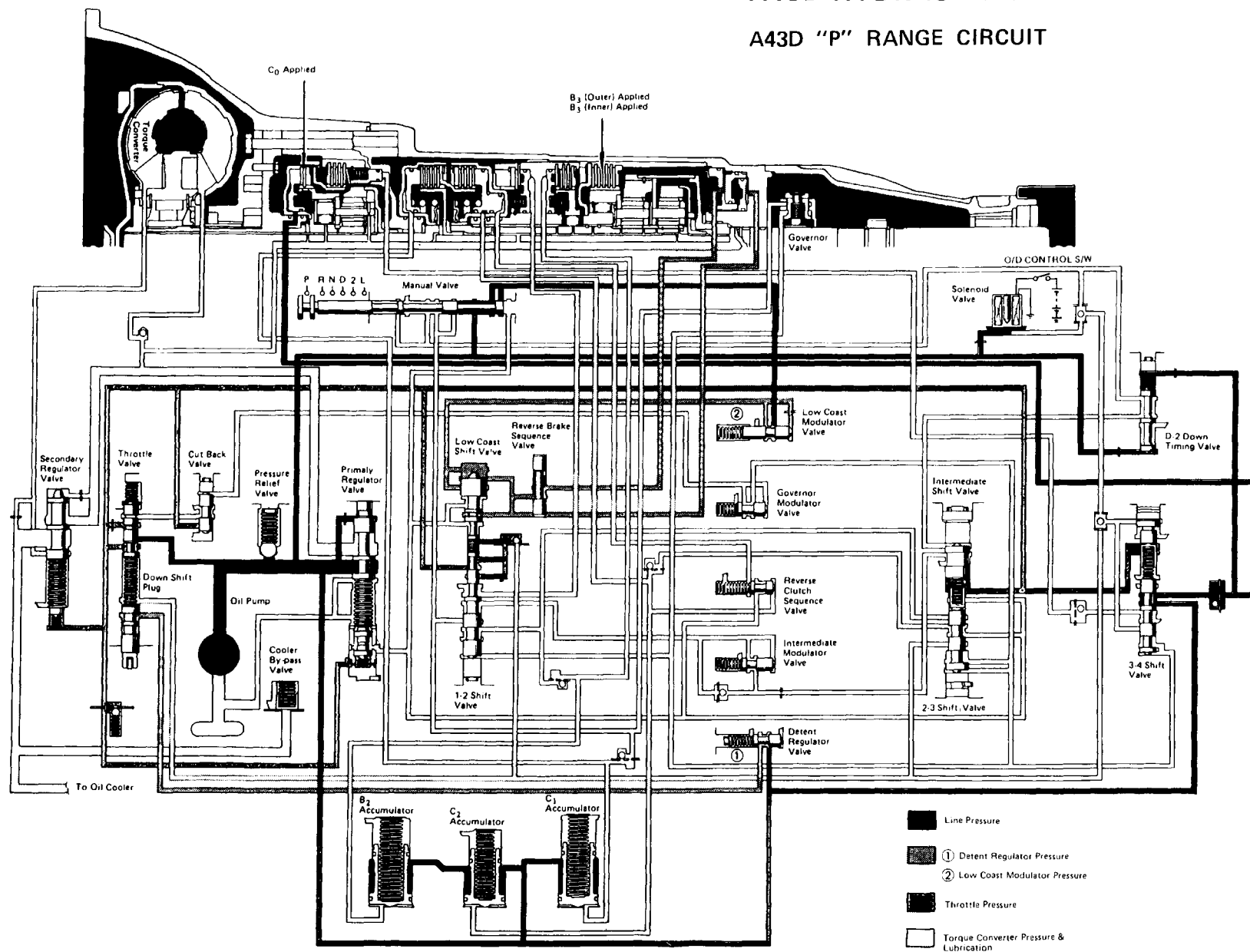
Part Name	Part No.	Sec.	Use etc.
Seal packing No. 102	08826-00080	EM	Engine oil pan
Anaerobic adhesive	08833-00070	SR	Upper bracket bolt
Windshield glass adhesive set No. 15	08850-00070	BO	Windshield glass [0 — 15°C]
Windshield glass adhesive set No. 35	08850-00080	BO	Windshield glass [15 — 35°C]
Windshield glass adhesive set No. 45	08850-00090	BO	Windshield glass [35 — 45°C]
Dam kit	04562-30030	BO	Windshield glass
Glass sealer	08705-00010	BO	Windshield glass
Butyl tape set	08850-00065	BO	Quarter window glass
Glass sealer	68177-89101	BO	Quarter window glass

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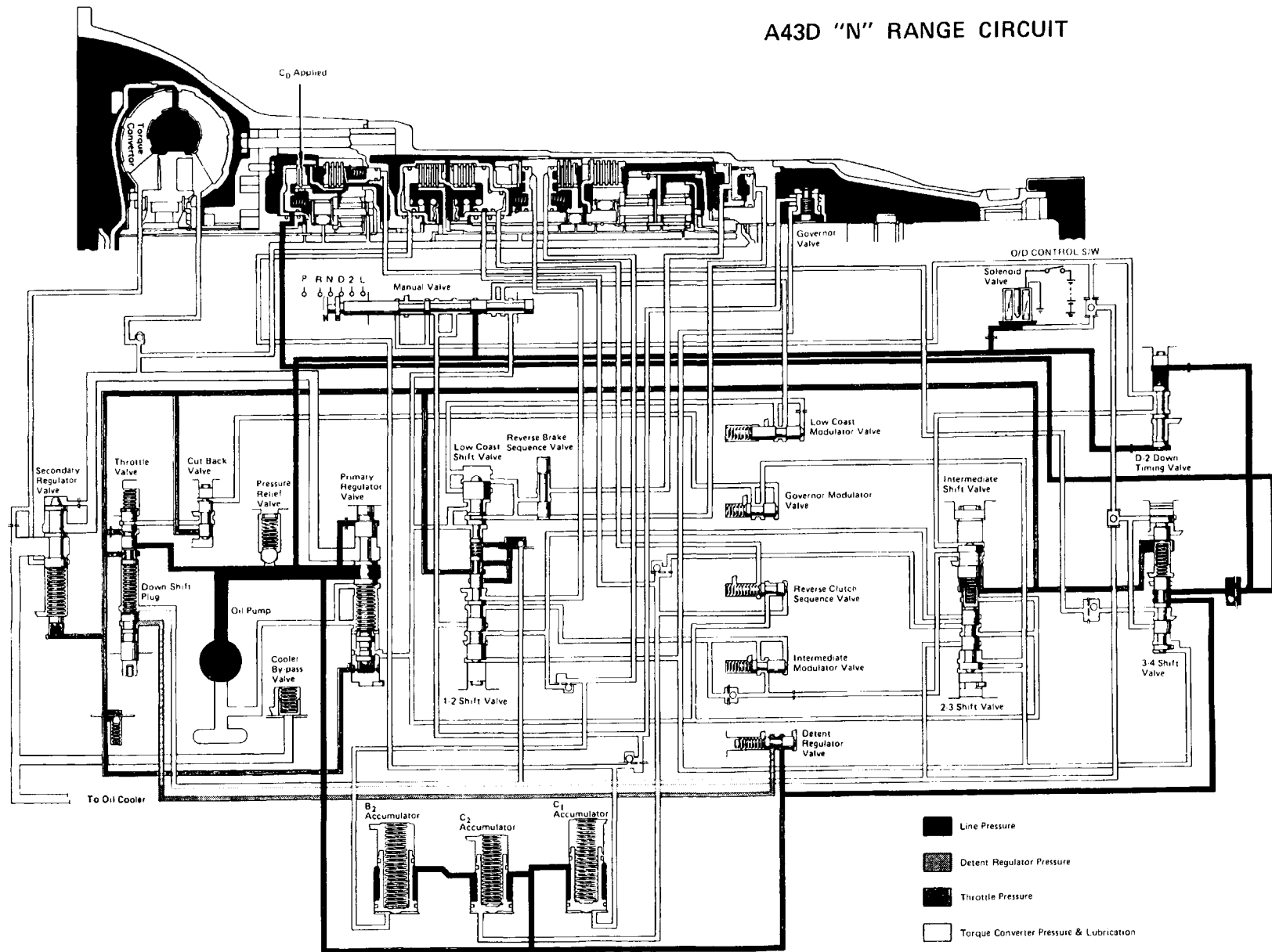
# **AUTOMATIC TRANSMISSION HYDRAULIC CIRCUIT**

## A43D HYDRAULIC CIRCUIT

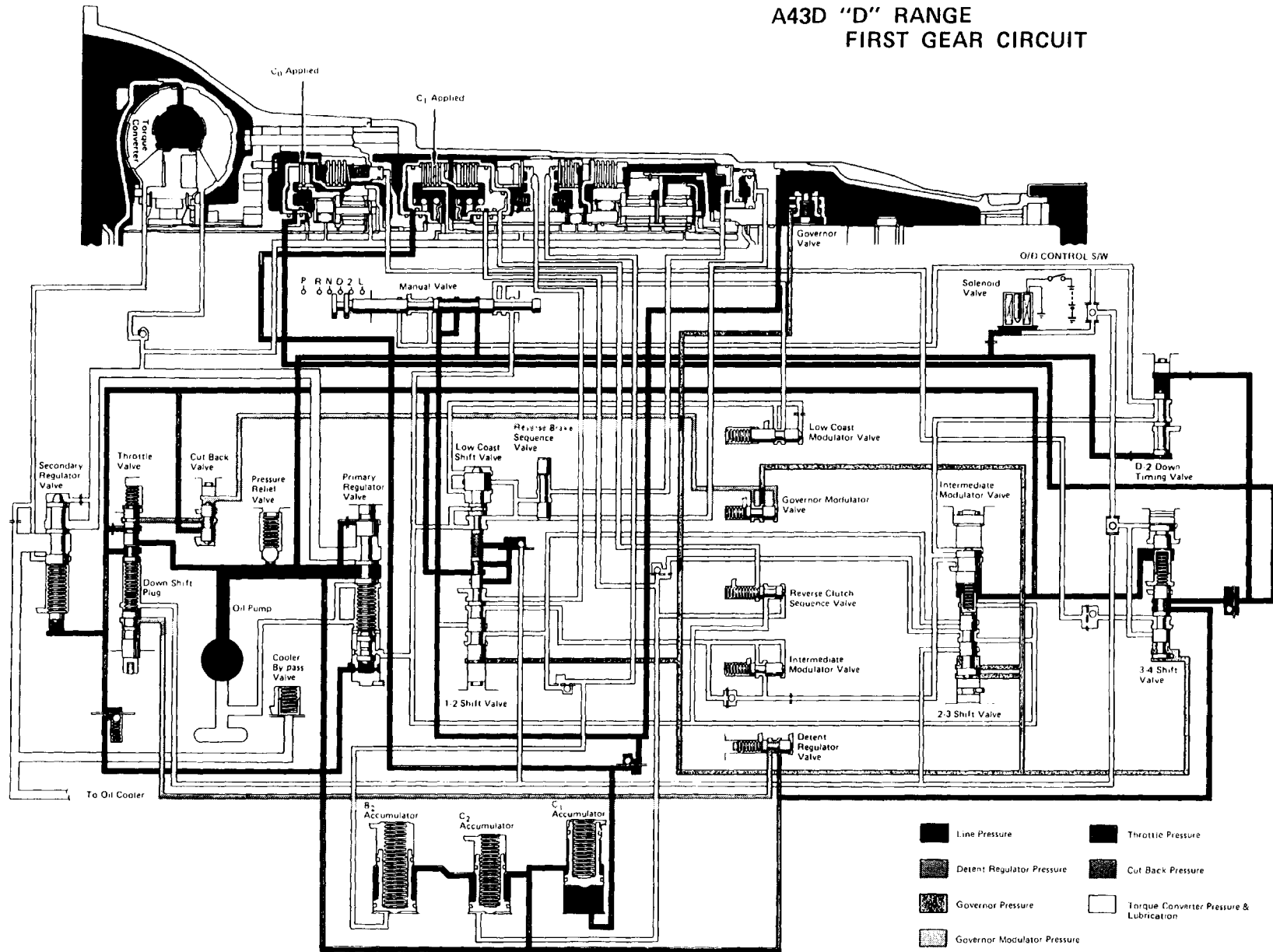
## A43D "P" RANGE CIRCUIT



# A43D "N" RANGE CIRCUIT

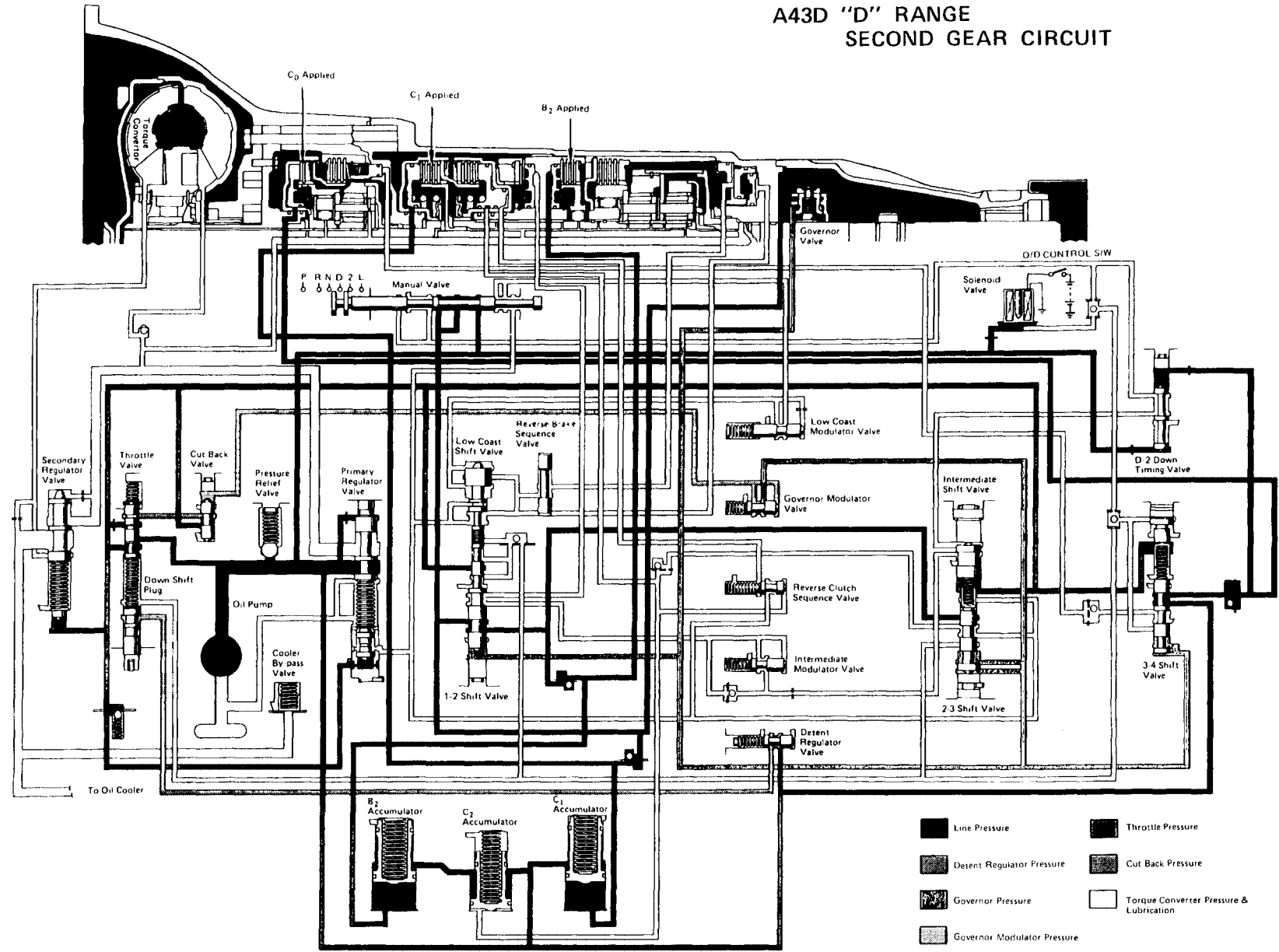


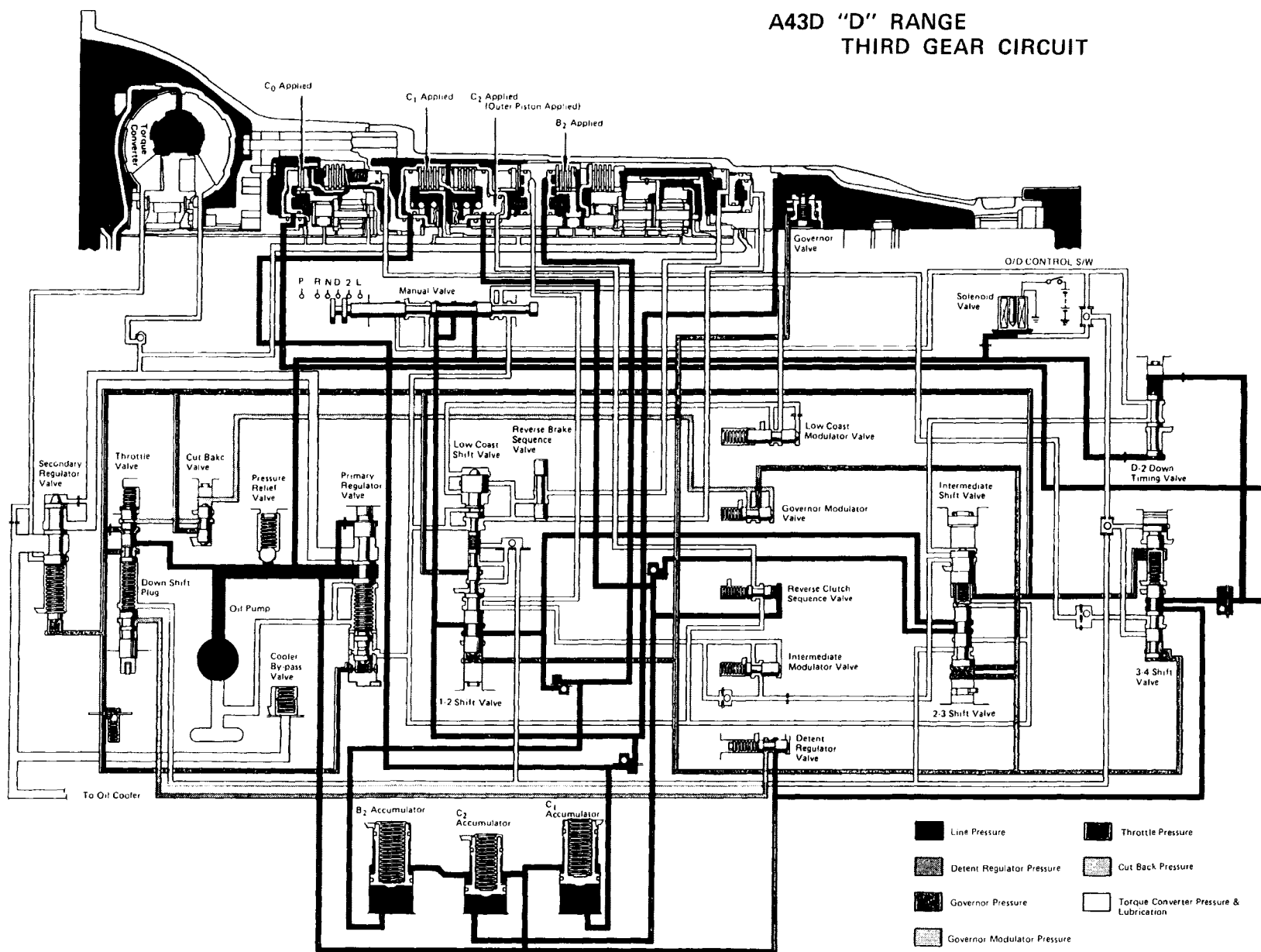
# A43D "D" RANGE FIRST GEAR CIRCUIT



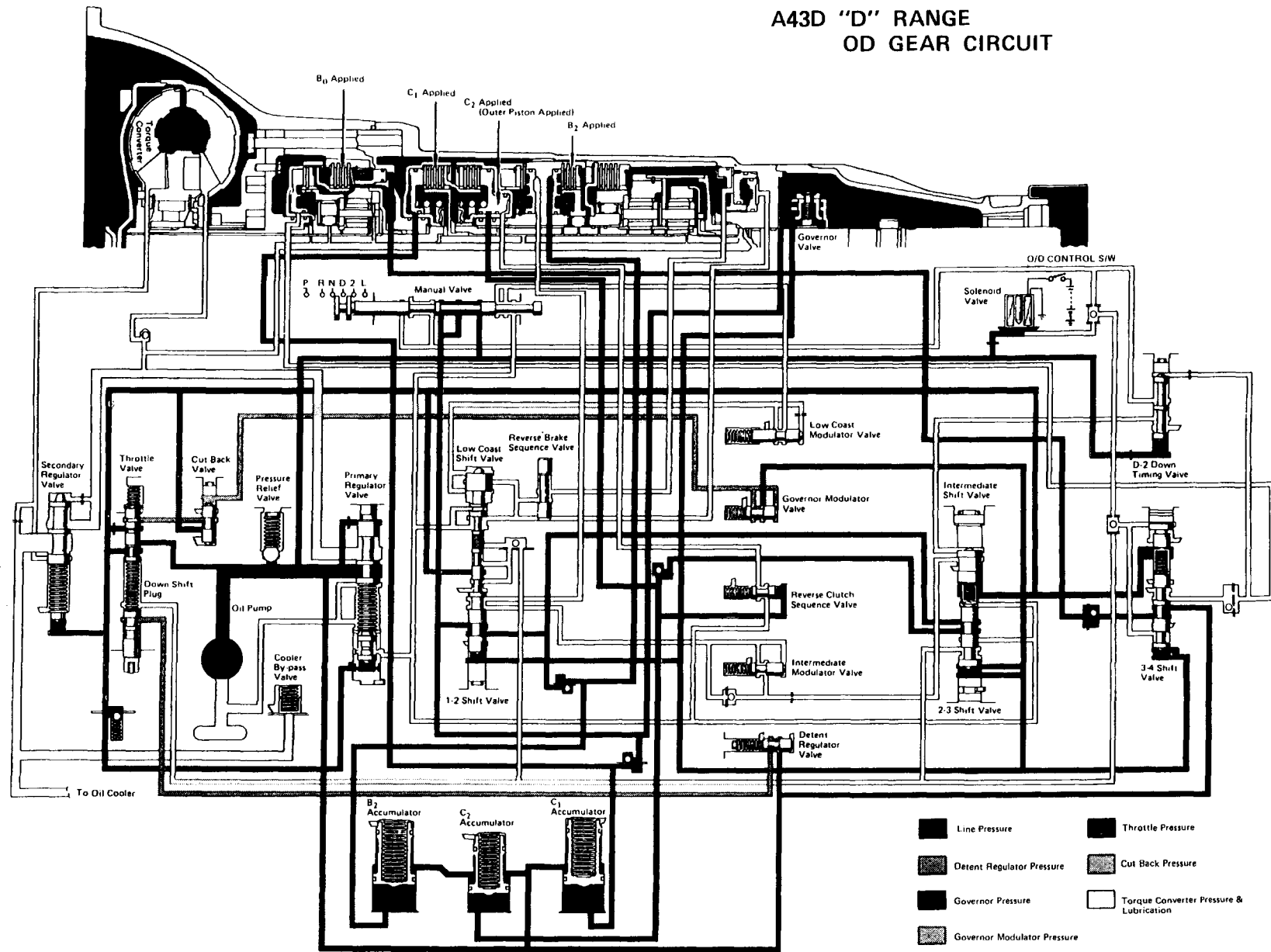


# A43D "D" RANGE SECOND GEAR CIRCUIT

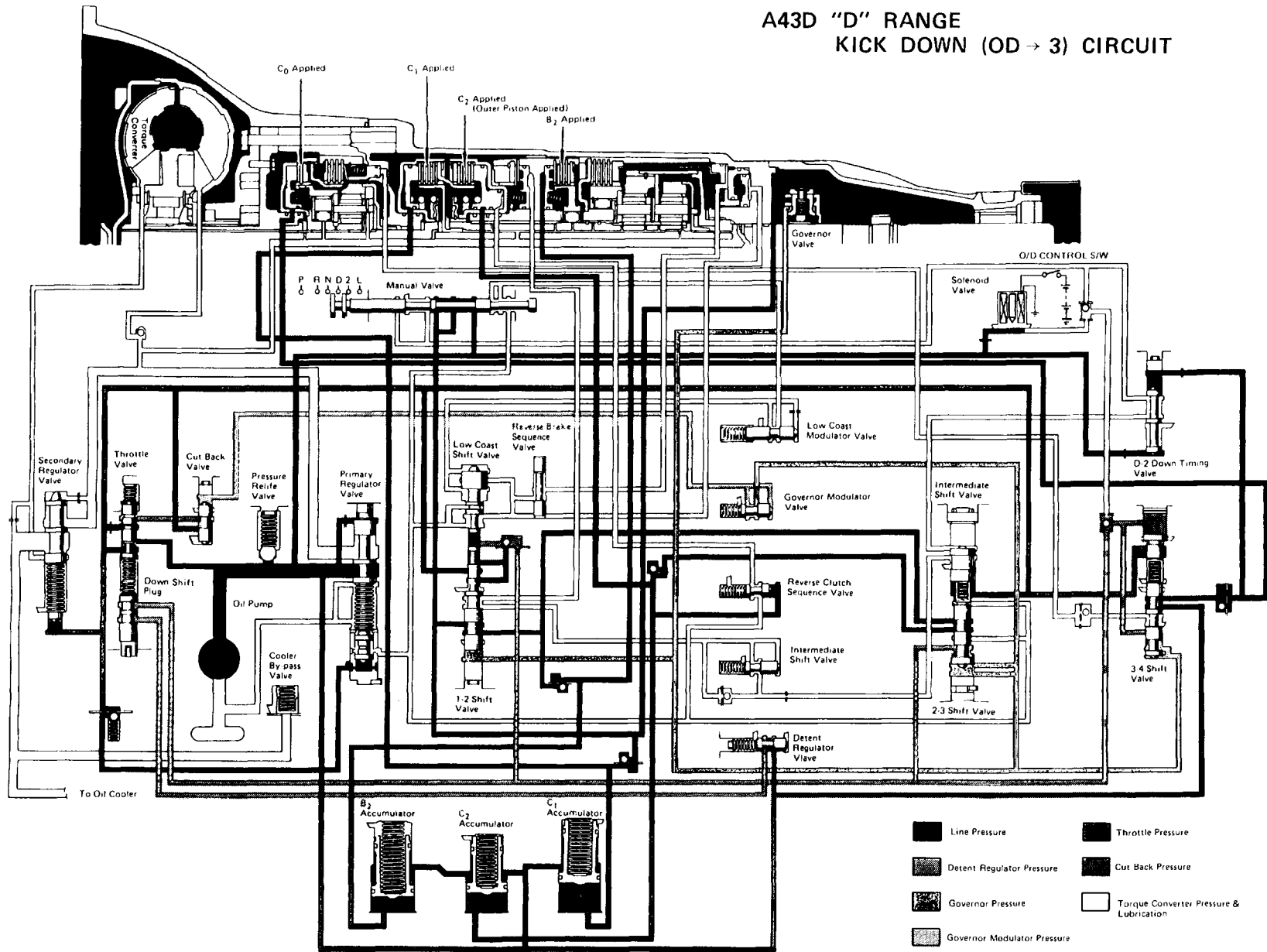




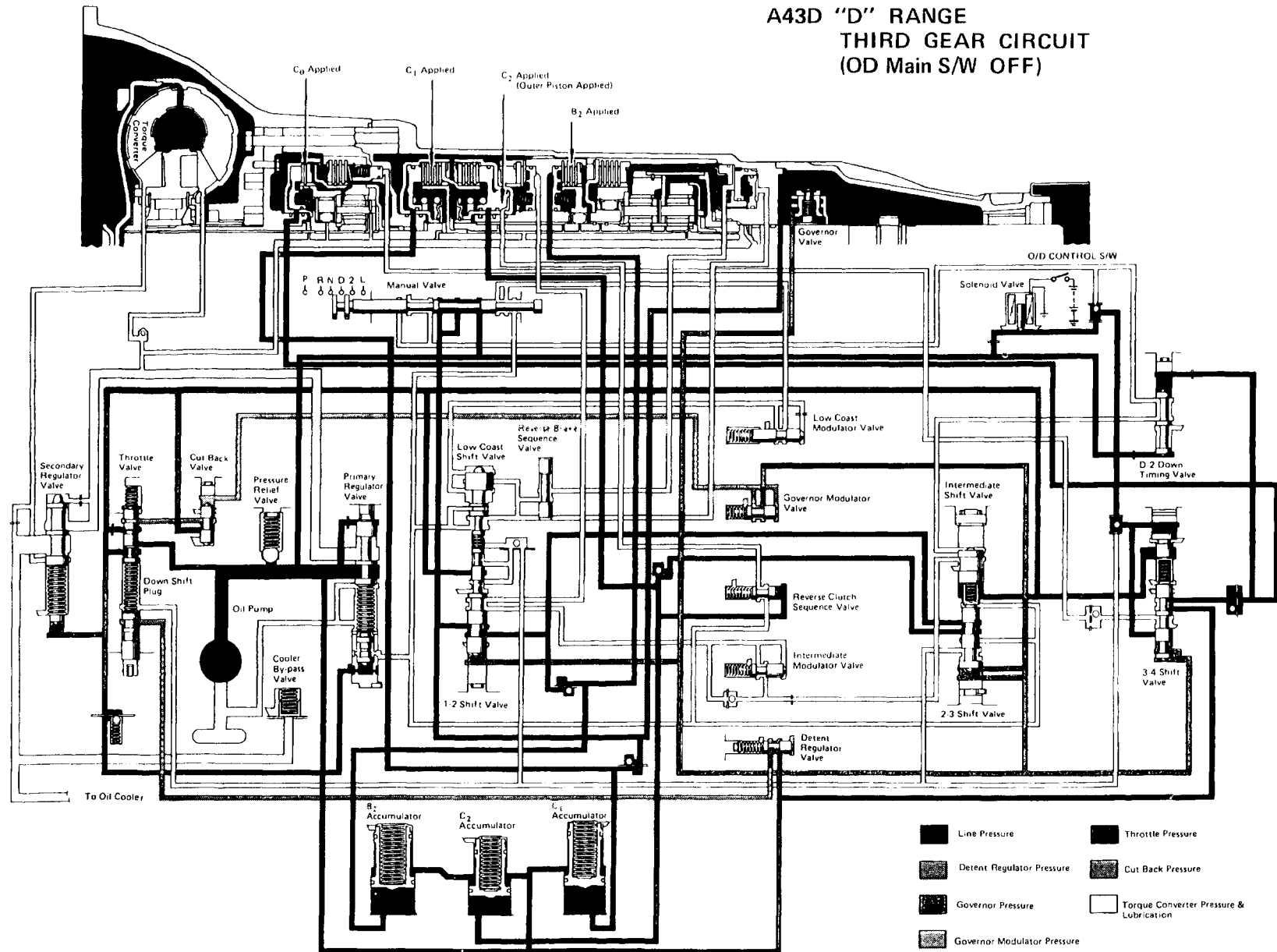
# A43D "D" RANGE OD GEAR CIRCUIT



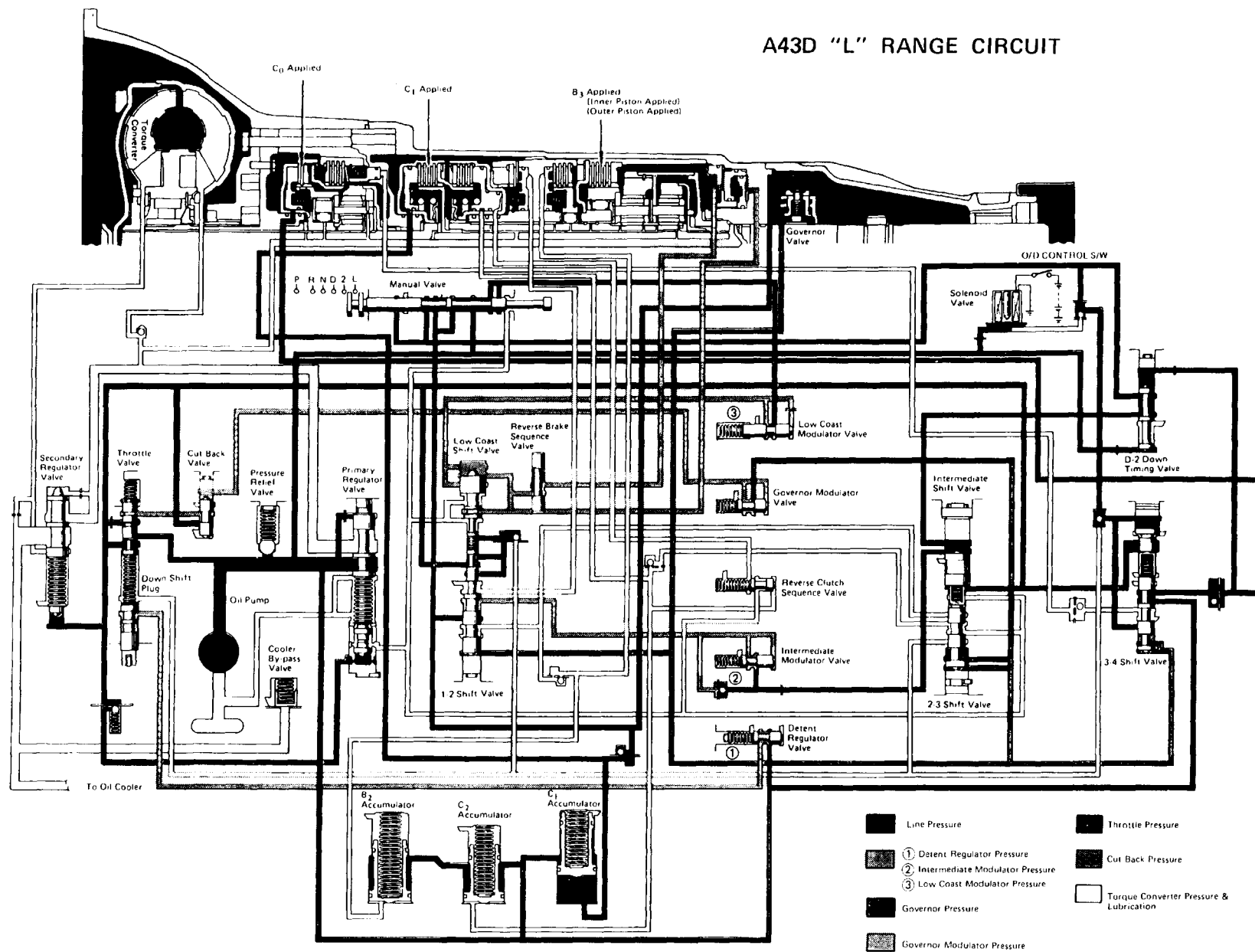
# A43D "D" RANGE KICK DOWN (OD → 3) CIRCUIT



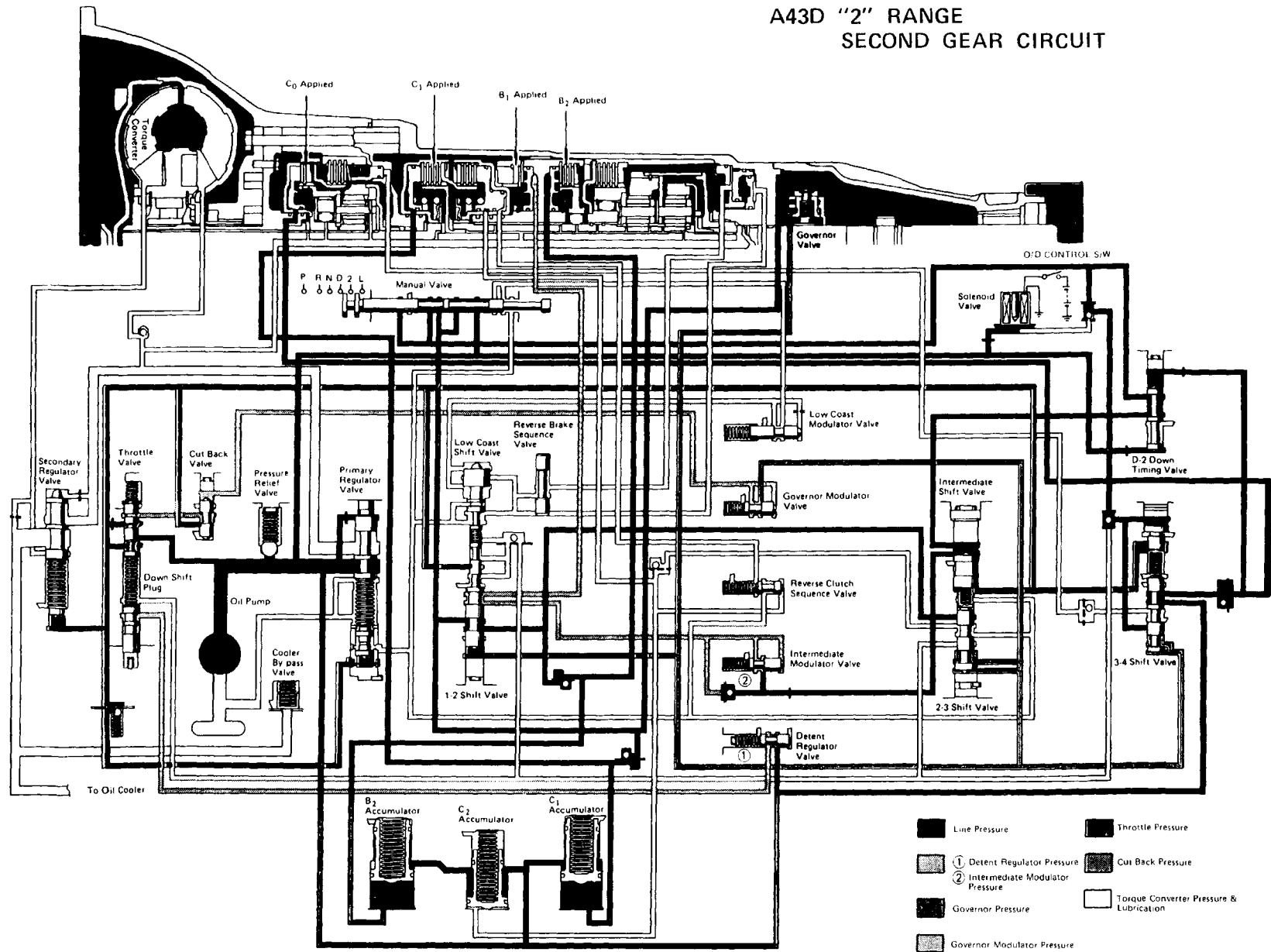
# A43D "D" RANGE THIRD GEAR CIRCUIT (OD Main S/W OFF)



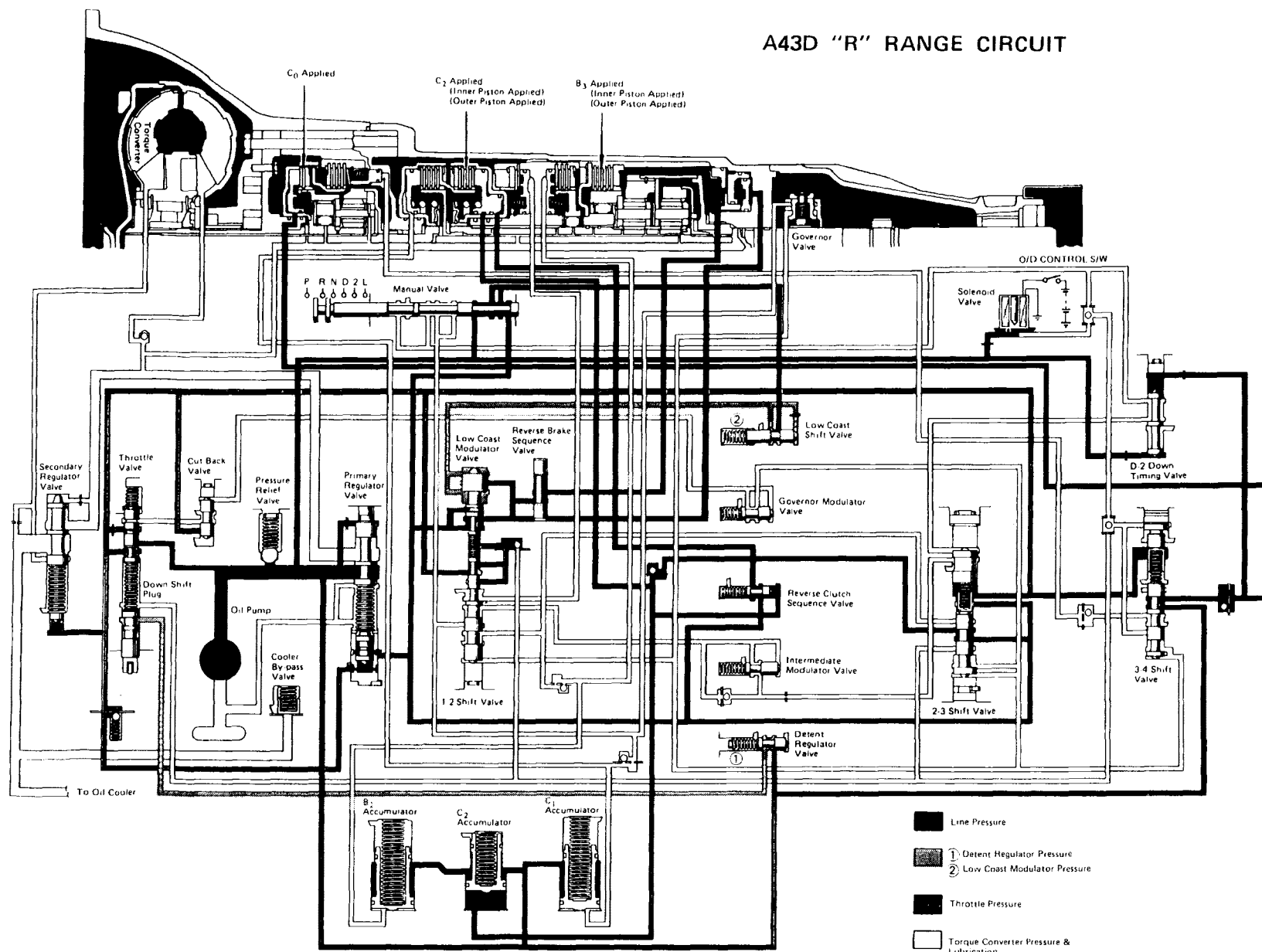
## A43D "L" RANGE CIRCUIT



# A43D "2" RANGE SECOND GEAR CIRCUIT



## A43D "R" RANGE CIRCUIT
















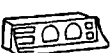
















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# **ELECTRICAL WIRING DIAGRAMS**

# SYSTEM INDEX

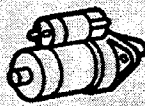
TOYOTA TRUCK AND 4 RUNNER (GASOLINE)

1985 Model (Page 1 to Page 4)

SYSTEMS	LOCATION	SYSTEMS	LOCATION
Air Conditioner, Cooler and Heater	 2-1	Radio and Tape Player	 4-7
Auto Antenna	 4-7	Rear Air Conditioner	 2-3
Back-up Lights	 3-1	Rear Window Defogger	 3-4
Charging	 1-5	Rear Wiper and Washer	2-6
Cigarette Lighter	 4-6	Starting	 1-1
Clock	 4-6	Stop Lights	 3-8
Combination Meter	 2-7	Taillights and Illumination	 4-1
Cruise Control	 3-7	Turn Signal and Hazard	 3-2
EFI	 1-3	Unlock and Seat Belt Warning	 3-1
Emission Control	 1-7	Winch	 3-4
Front Wiper and Washer	 3-5	Work Light	 4-1
Headlights	 4-3		
Horn	 3-3		
Ignition	 1-2		
Interior Lights	 4-4		
Overdrive	 3-6		
Power Source	 1-1		
Power Windows	 2-4		



Power Source



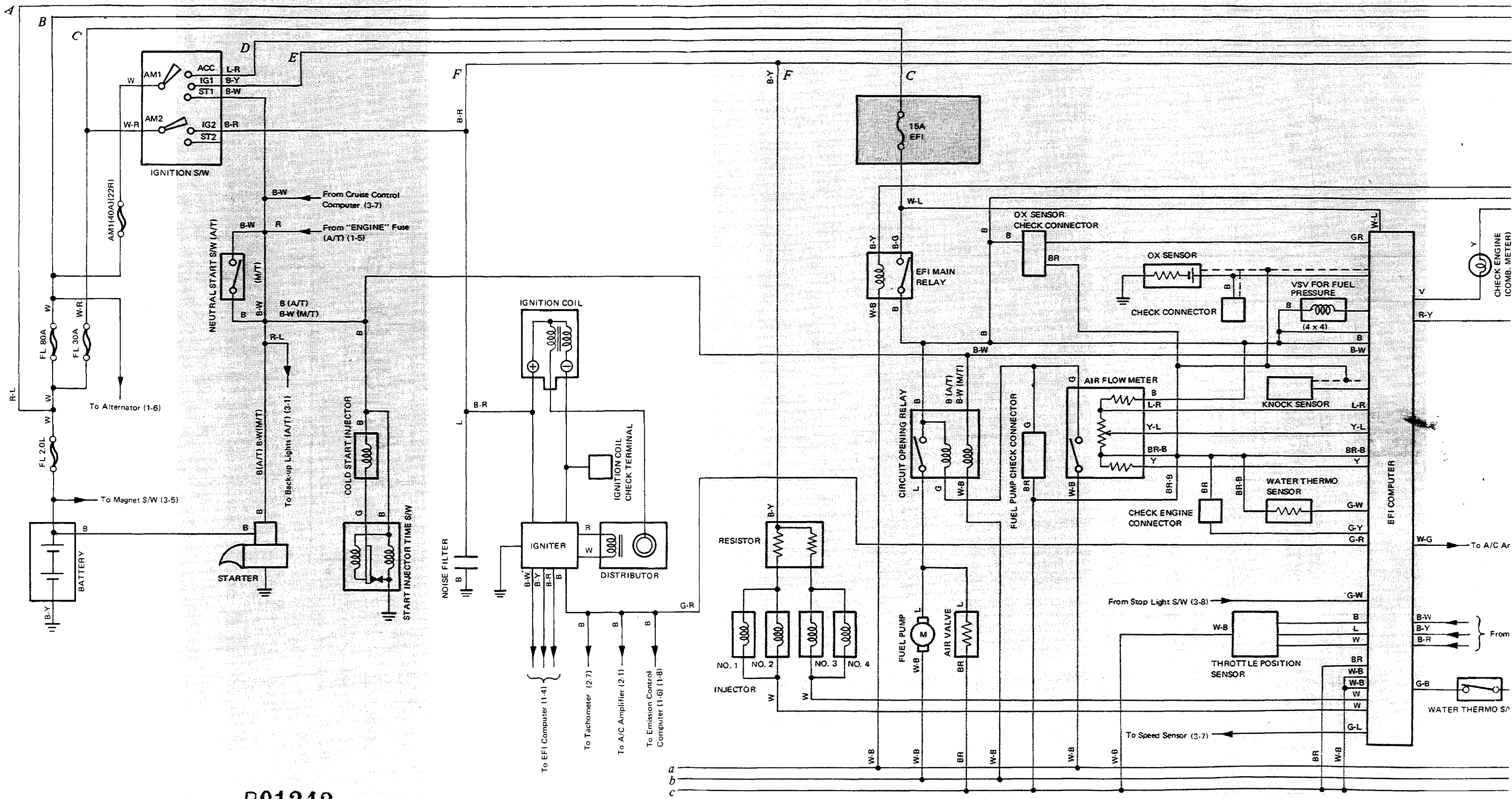
Starting



Ignition



EFI



B01242

Ground points

a = Located under left front pillar

b = Located in right front fender

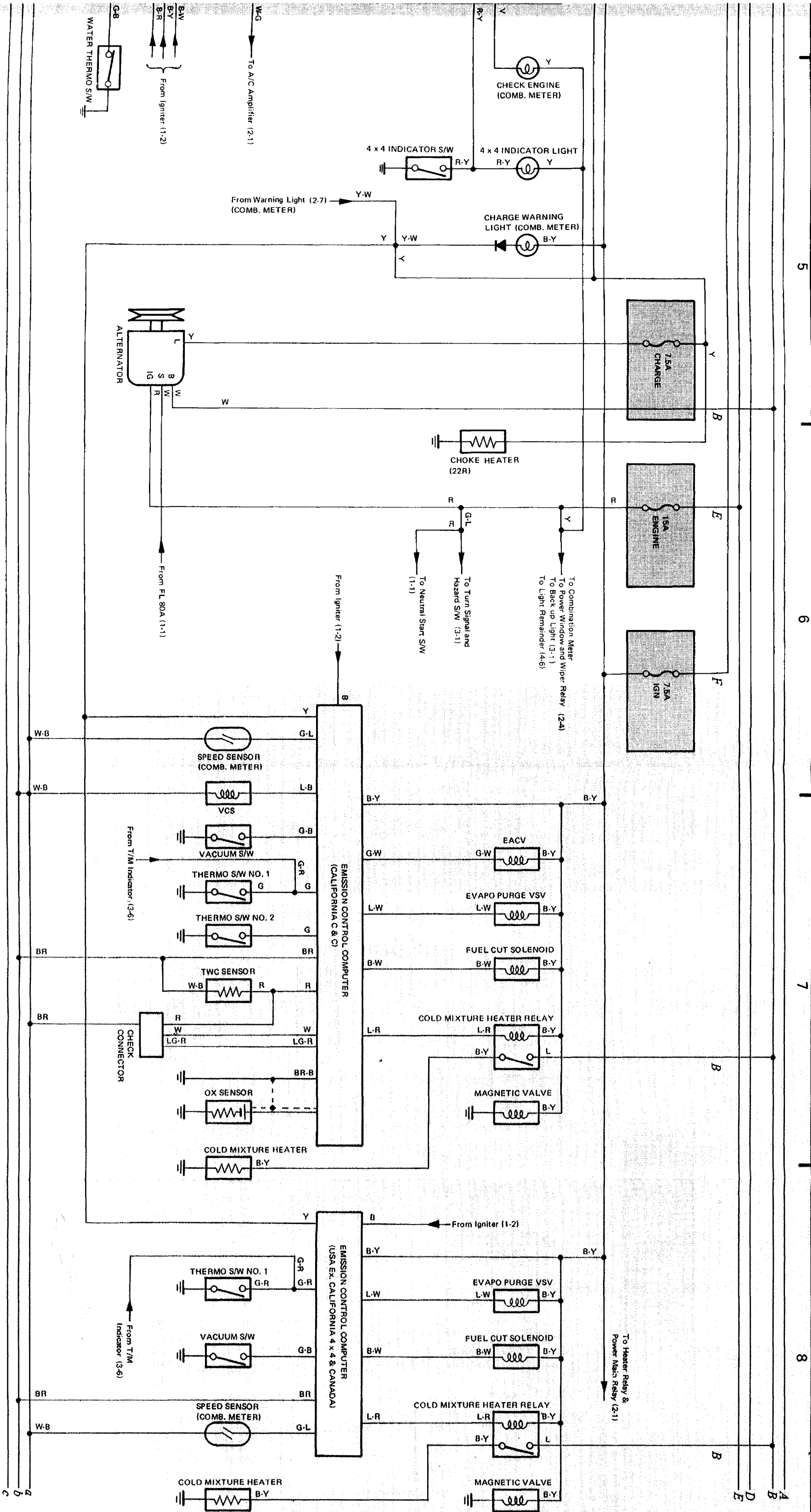
c = Located on engine block



Charging



Emission Control



B00252

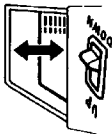
TOYOTA TRUCK AND 4 RUNNER (GASOLINE) (Cont'd) 2



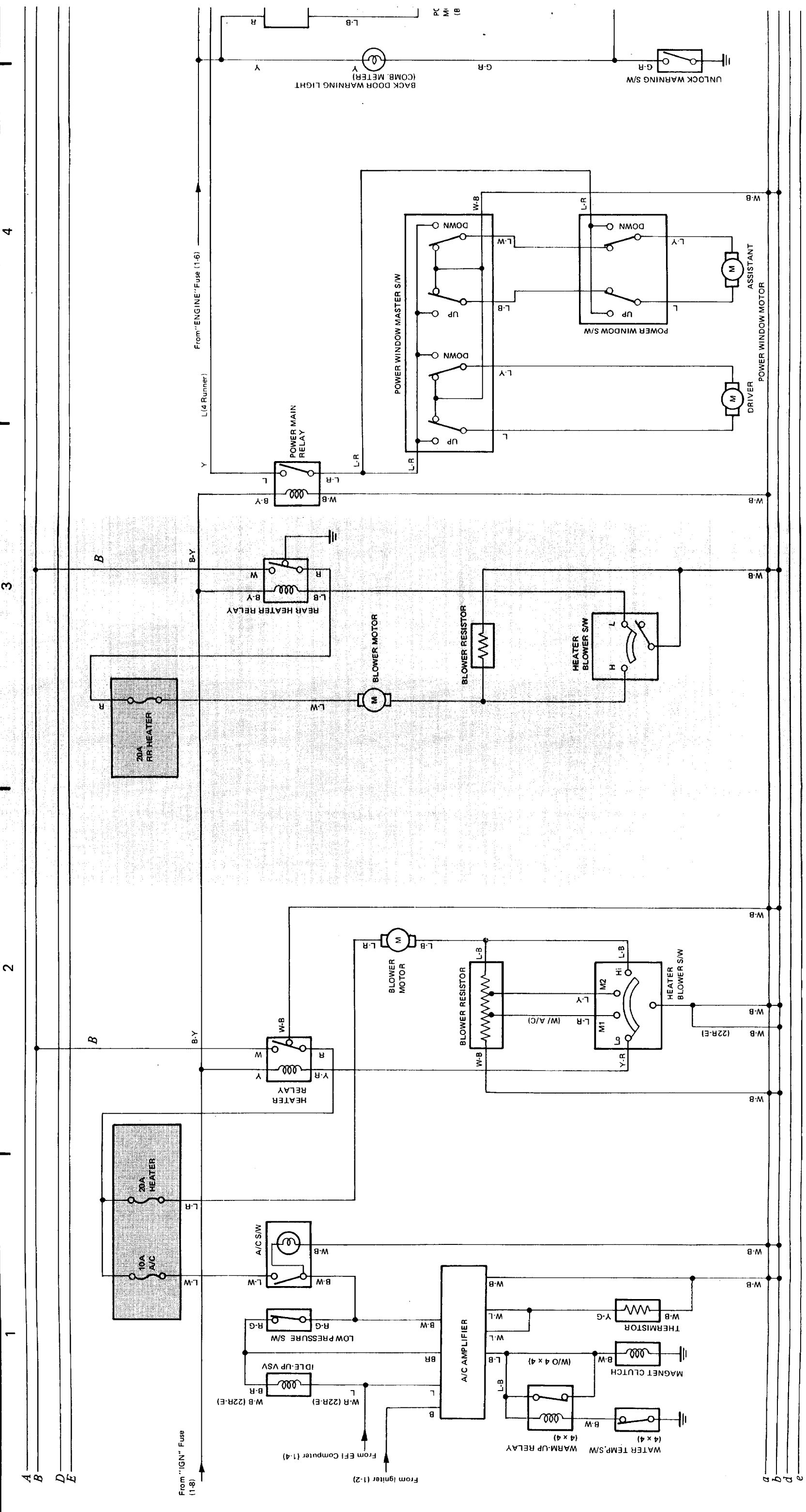
Air Conditioner, Cooler and Heater



Rear Air Conditioner  
(4 Runner)

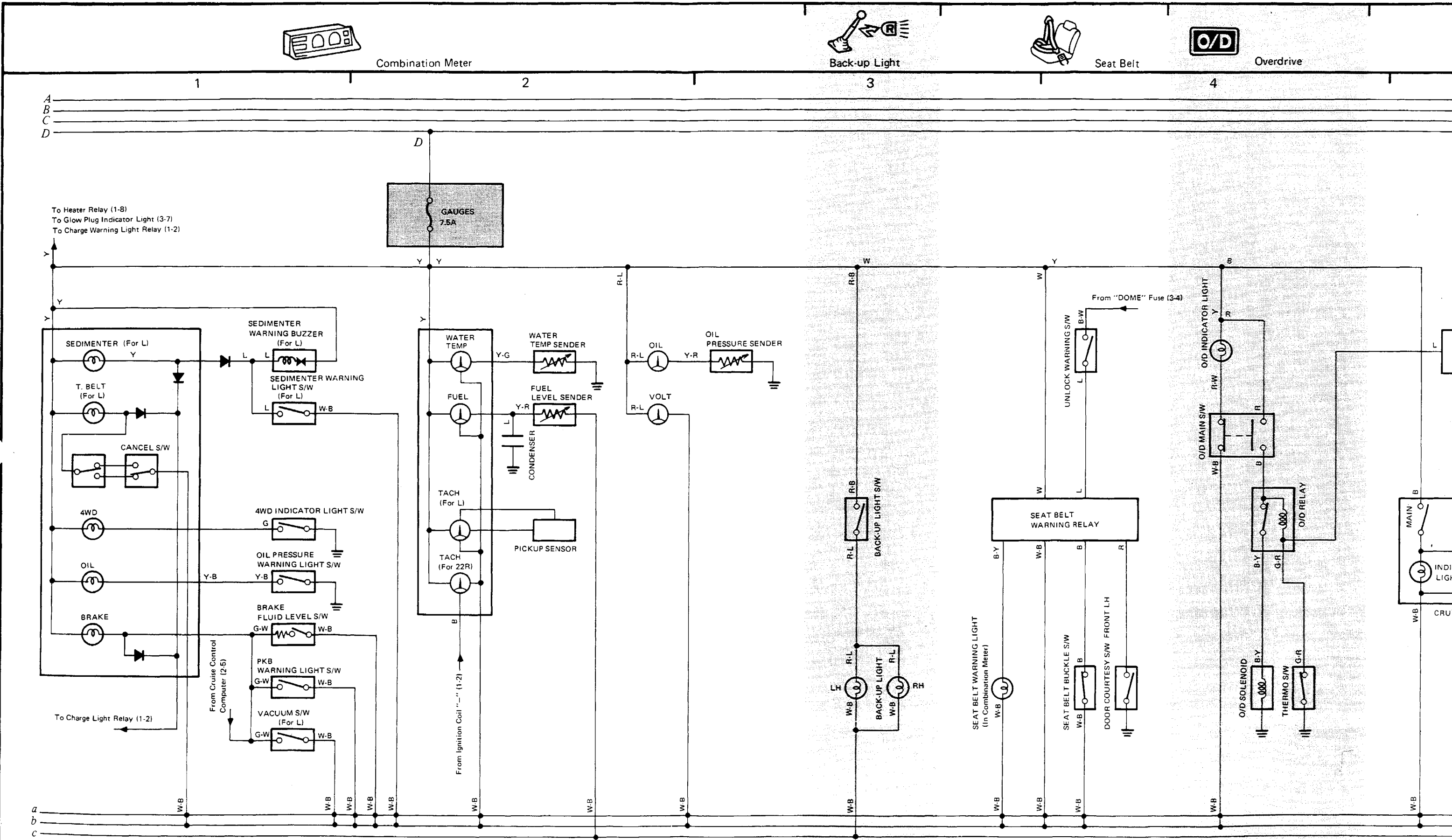


Power Windows





TOYOTA TRUCK, PICKUP (Cont'd)



Ground points  
a = Located near regulator  
b = Located instrument panel on right side bracket  
c = Located in frame of last cross member





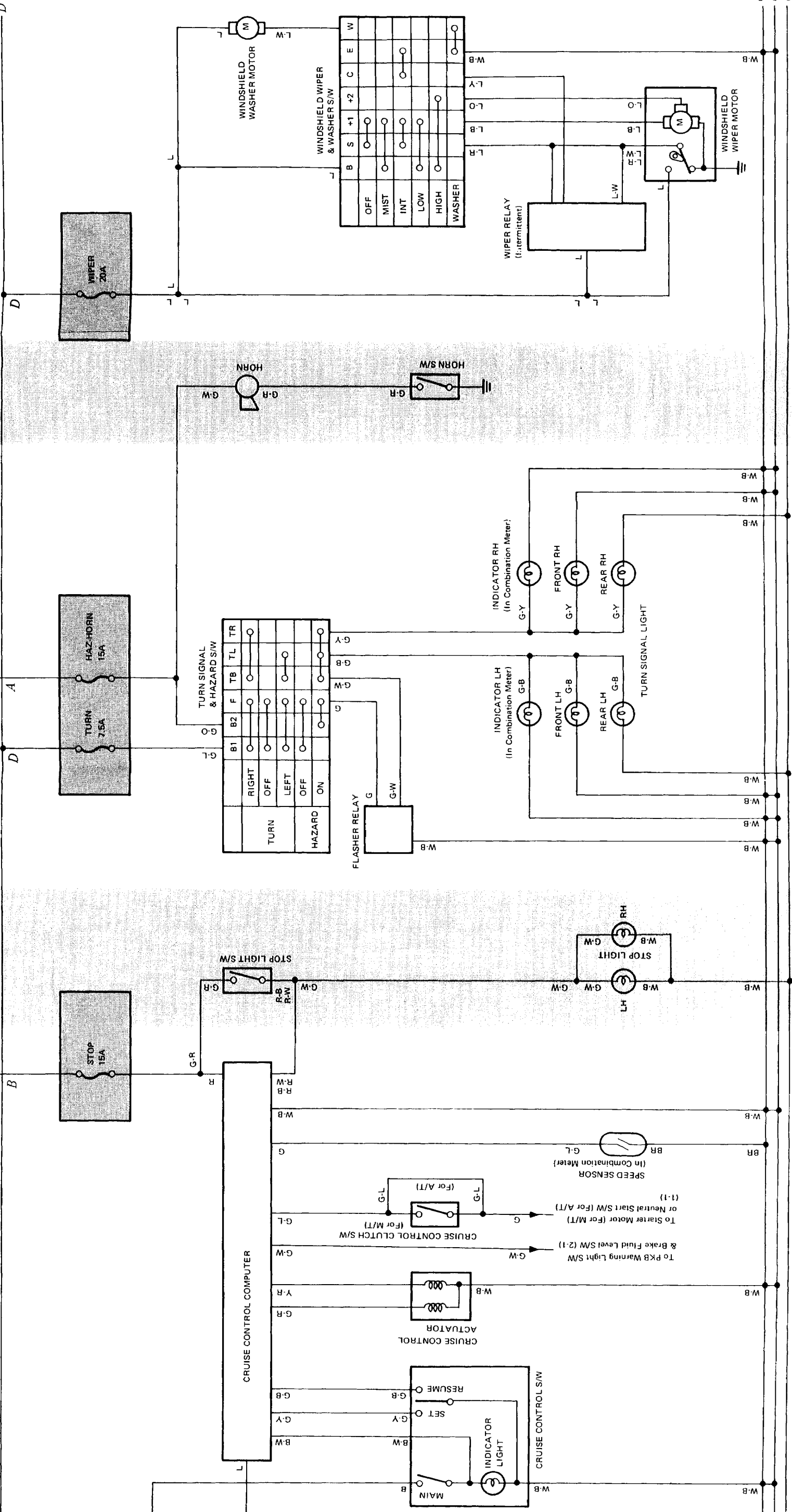
A B C D



A B C D



A B C D





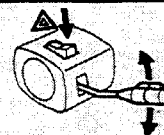
# TOYOTA TRUCK AND 4 RUNNER (GASOLINE) (Cont'd)



Back-up Lights



Unlock and  
Seat Belt Warning



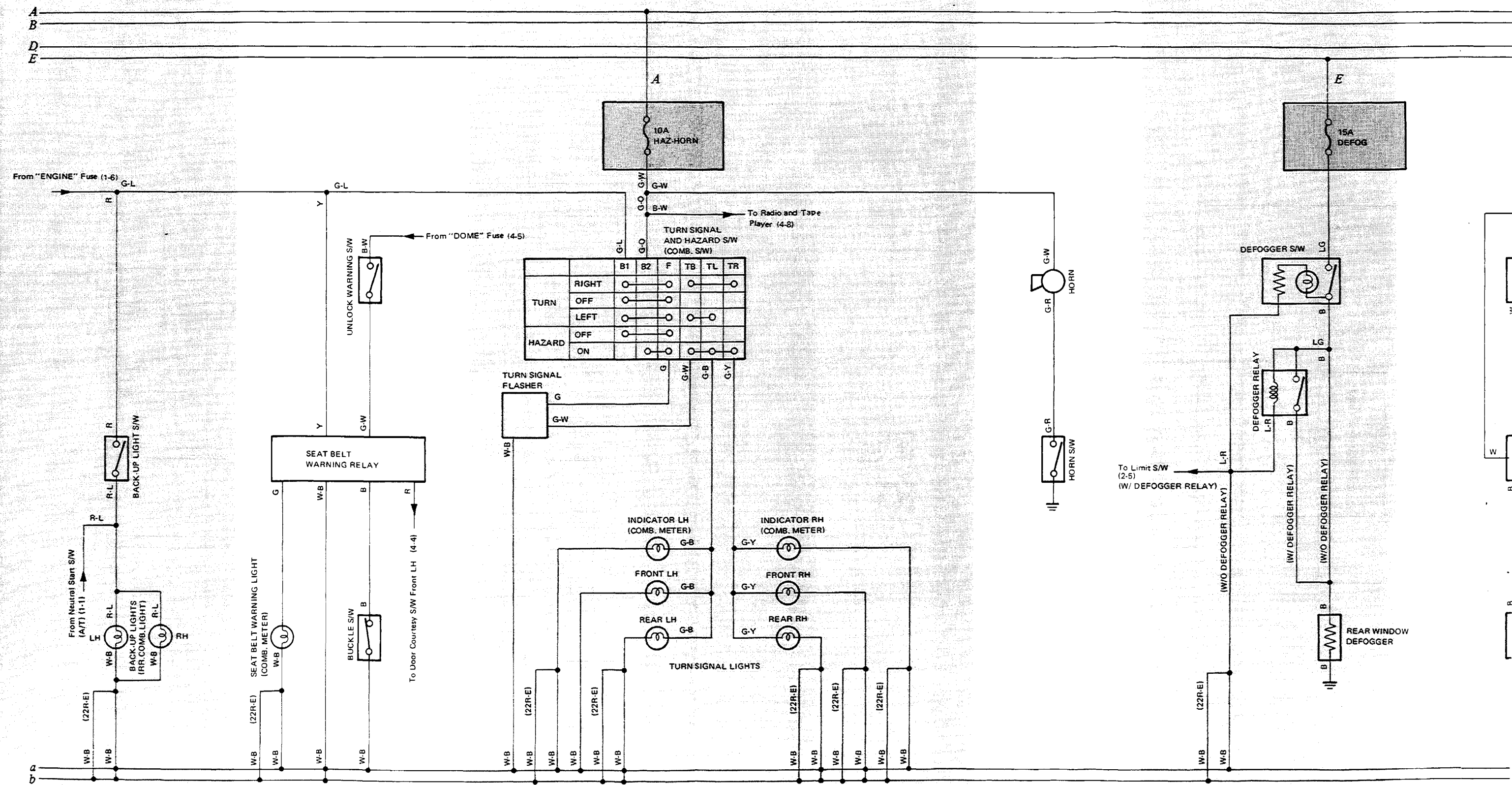
Turn Signal and Hazard



Horn



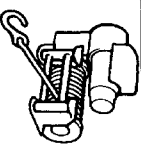
Rear Window Defogger



Ground points

$a$  = Located under left front pillar

$b$  = Located in right front fender



Winch



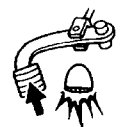
Front Wiper and Washer



Overdrive



Cruise Control



Stop Lights

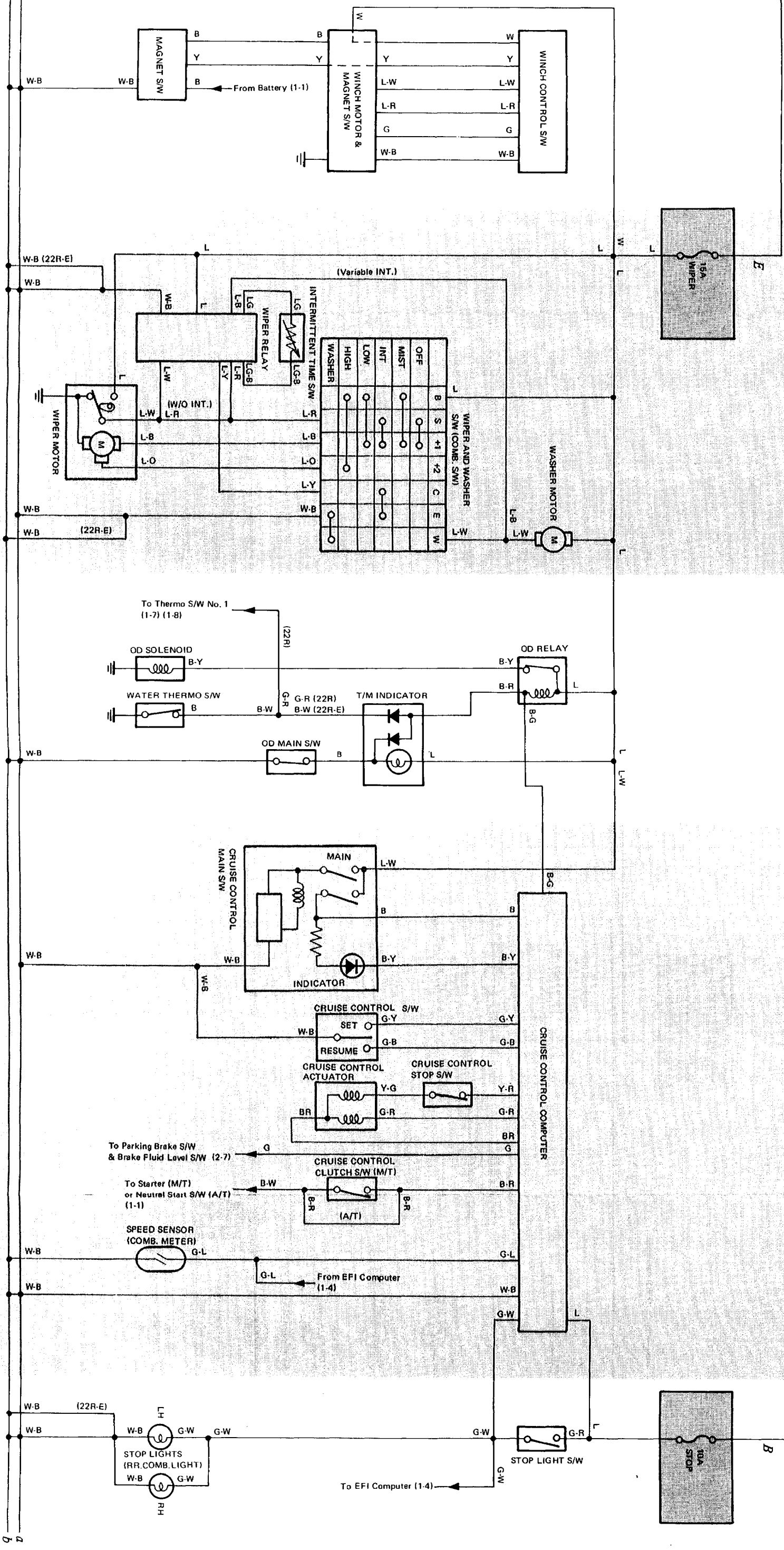
5

6

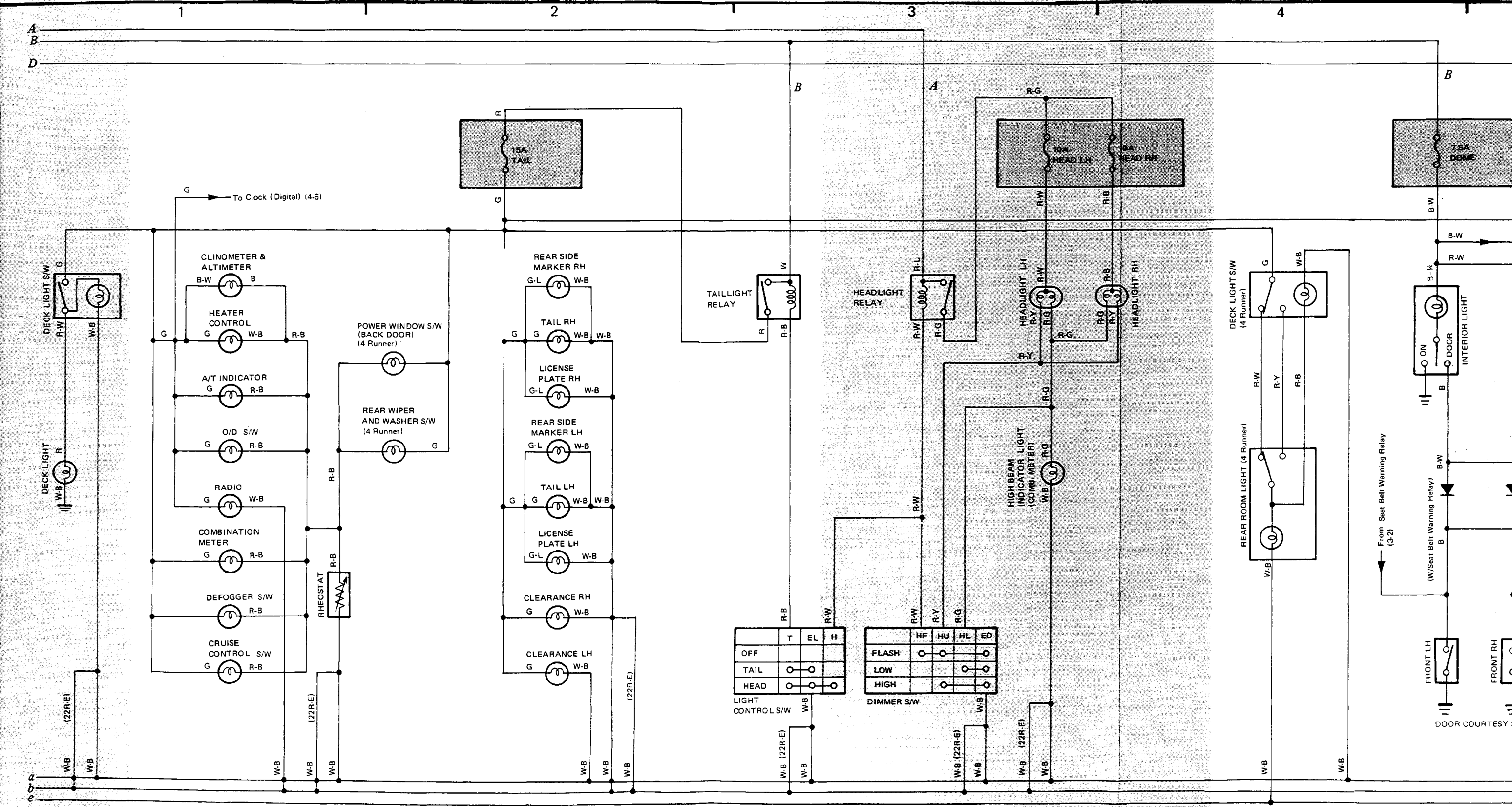
7

8

A  
B  
D



TOYOTA TRUCK AND 4 RUNNER (GASOLINE) 4



Ground points    *a* = Located under left front pillar    *b* = Located in right front fender    *e* = Located on center of back panel



