

1

**BTRA M74**



1.

1.

BTRA M74

가

4

가

BTRA M74

가

TCU(Transmission Control Unit)

TCU

TPS,

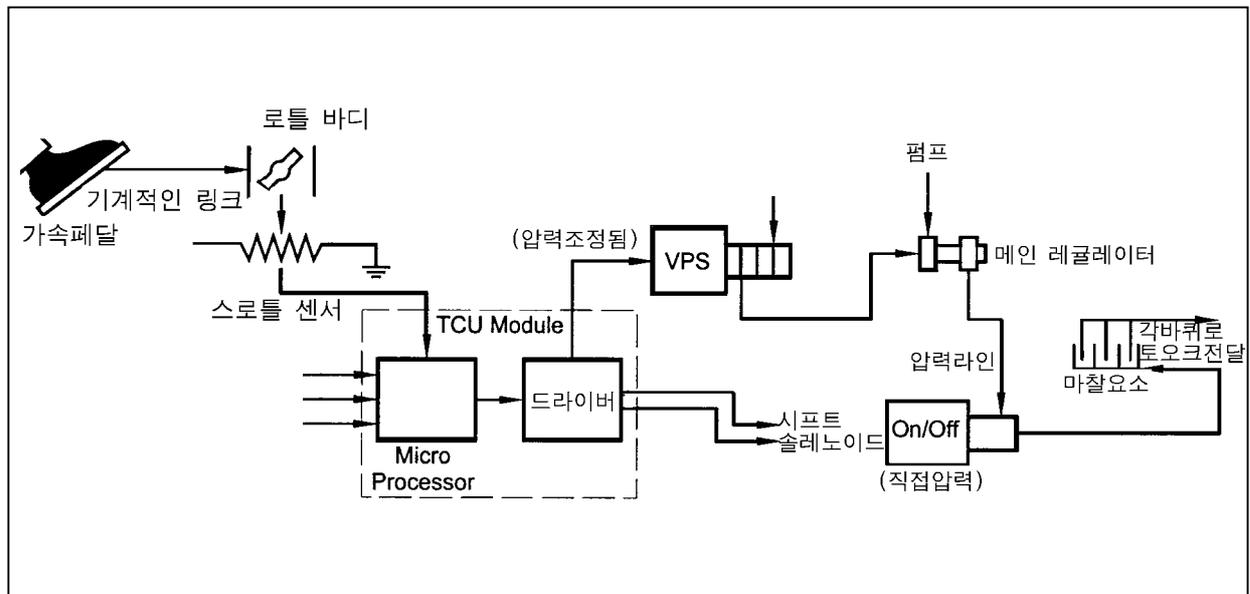
TCU

3

1

가

“Normal” “Power” “Winter”



2.

1.

		T - RIB TYPE	BELL SHAPE TYPE	BELL SHAPE TYPE(HPPC)	BELL SHAPE TYPE(HEP)
OM600	OM 661 LA OM 662 NA	7401 - 0000	7409 - 0000	7415 - 0000	7433 - 0000
	OM 662 LA	7404 - 0000	7410 - 0000	7414 - 0000	7432 - 0000
M100	M 161 (E23)	7405 - 0000	7407 - 0000	7413 - 0000	7431 - 0000
	M 162 (E32)	7402 - 0000	7408 - 0000	7412 - 0000	7430 - 0000

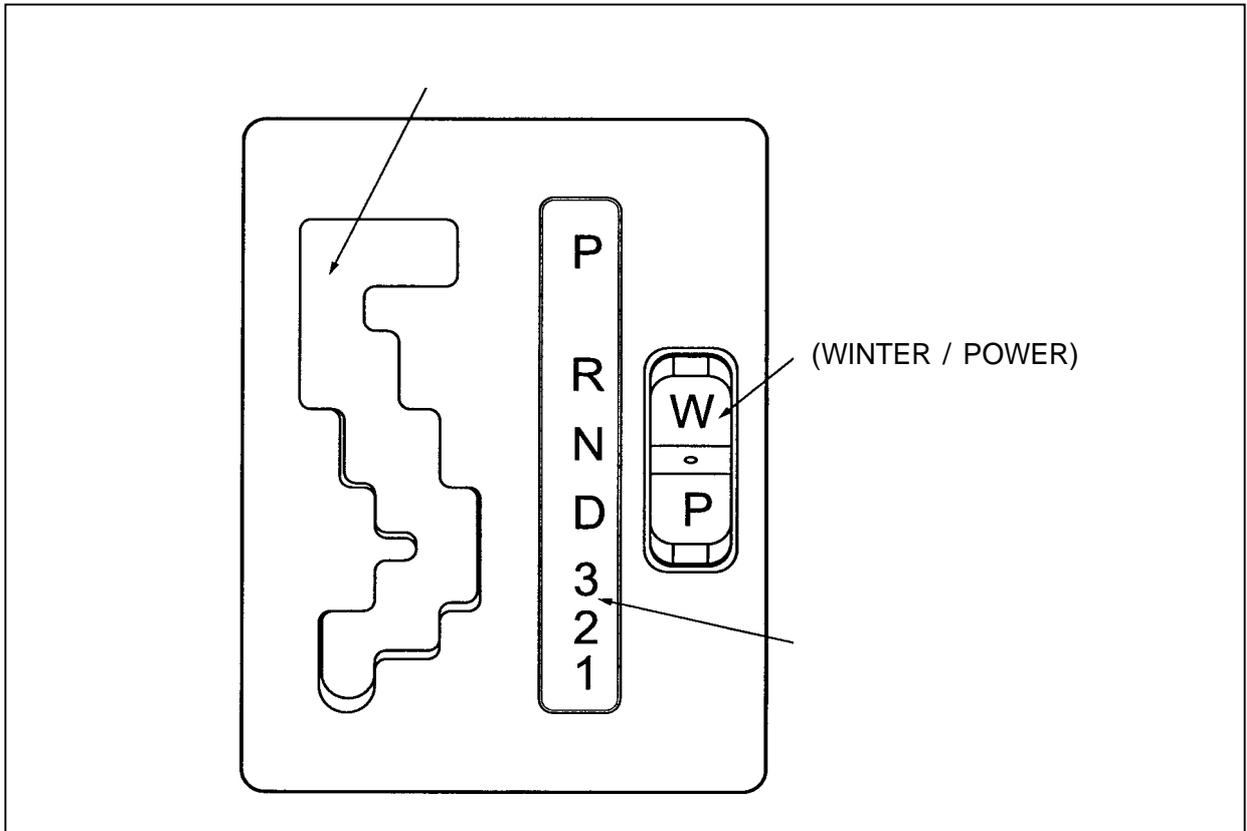
# BTRA M74

2.

	1	2.742 : 1	
	2	1.508 : 1	
	3	1.000 : 1	
	4	0.709 : 1	
		2.429 : 1	
		TQ 95	
		10.0	
(RPM)	7401/09/15/33 -0000	2,100 ~ 2,250	D23ST
	7404/10/14/32 -0000	1,900 ~ 2,050	D29ST
	7405/07/13/31 -0000	1,950 ~ 2,150	D29S(TP),G23D
	7402/08/12/30 -0000	1,850 ~ 2,050	G32D
	- 20	13,638 ~ 17,287	
	0	5,177 ~ 6,616	
	20	2,278 ~ 2,723	
	100	177 ~ 196	
	135	75 ~ 85	
T P S		0.4 ~ 1.0 V	
	(WOT)	3.0 ~ 4.5 V	
( / )	1	1.0 ~ 1.4 kΩ(1.0V)	
	2	1.8 ~ 2.2 kΩ(1.5V)	
	3	3.0 ~ 3.4 kΩ(2.0V)	
	D	4.5 ~ 4.9 kΩ(2.5V)	
	N	6.8 ~ 7.2 kΩ(3.0V)	
	R	10.8 ~ 11.2 kΩ(3.5V)	
	P	18.6 ~ 19.0 kΩ(4.0V)	

2.  
1.

BTRA M74



1	1 가 ,
2	1 - 2 가 ,
3	1 - 2 - 3 가 , 가
D ( )	1 4 가 , 3 4 가
N ( )	, 가
R ( )	,
P ( )	, 가 가

## 2.

- “Normal” TCU “Normal” “Power” “Winter” .
- “Power” TCU .
- “Winter” “Power” 가 .
- “D” 2 ,
- ( 가 ) , “Winter” .

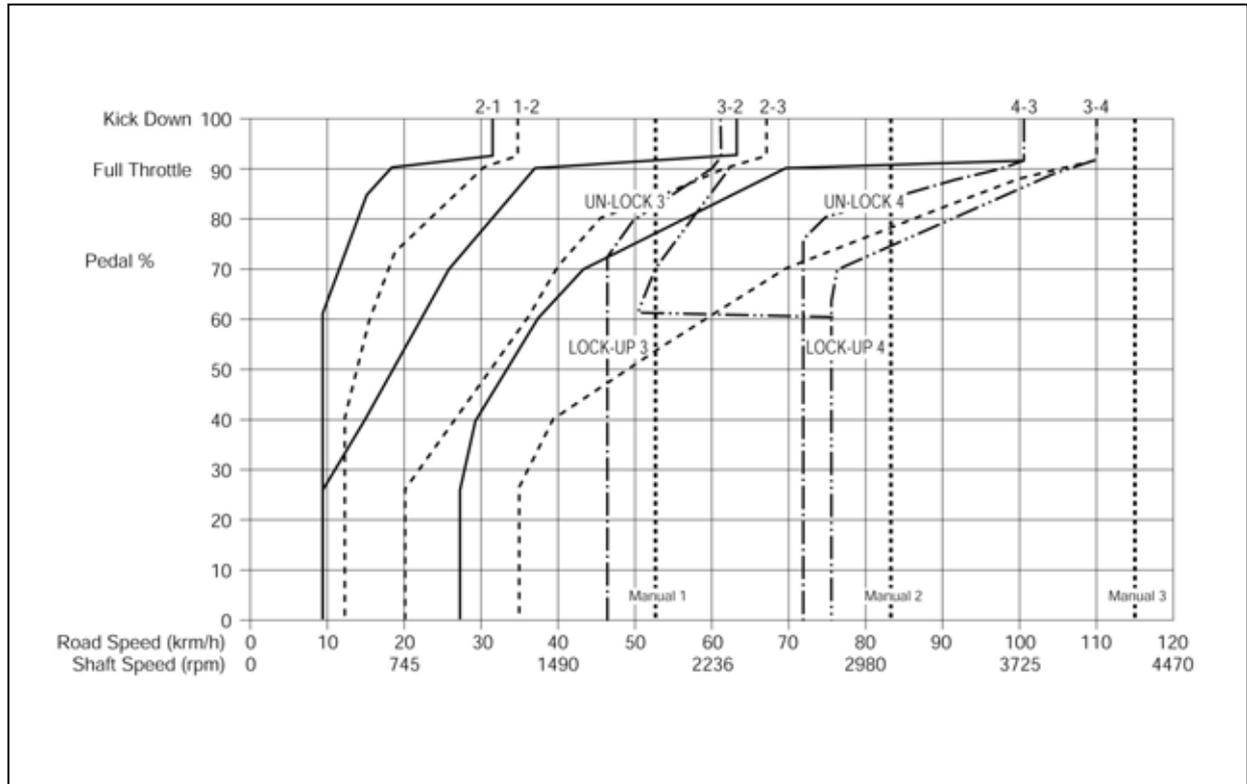
## 3.

- ( Power Winter)
- ( 가 135 ) “Power”
- “Power” .

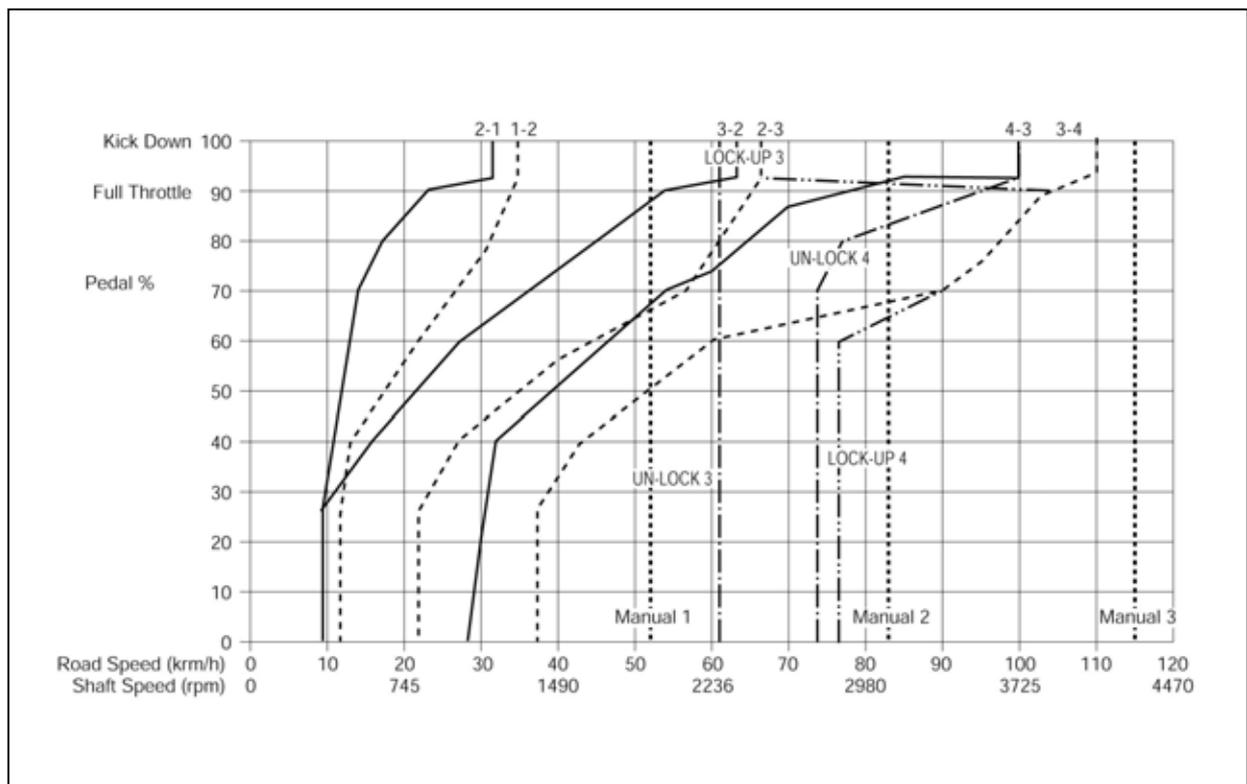
3.

1. OM 662 LA

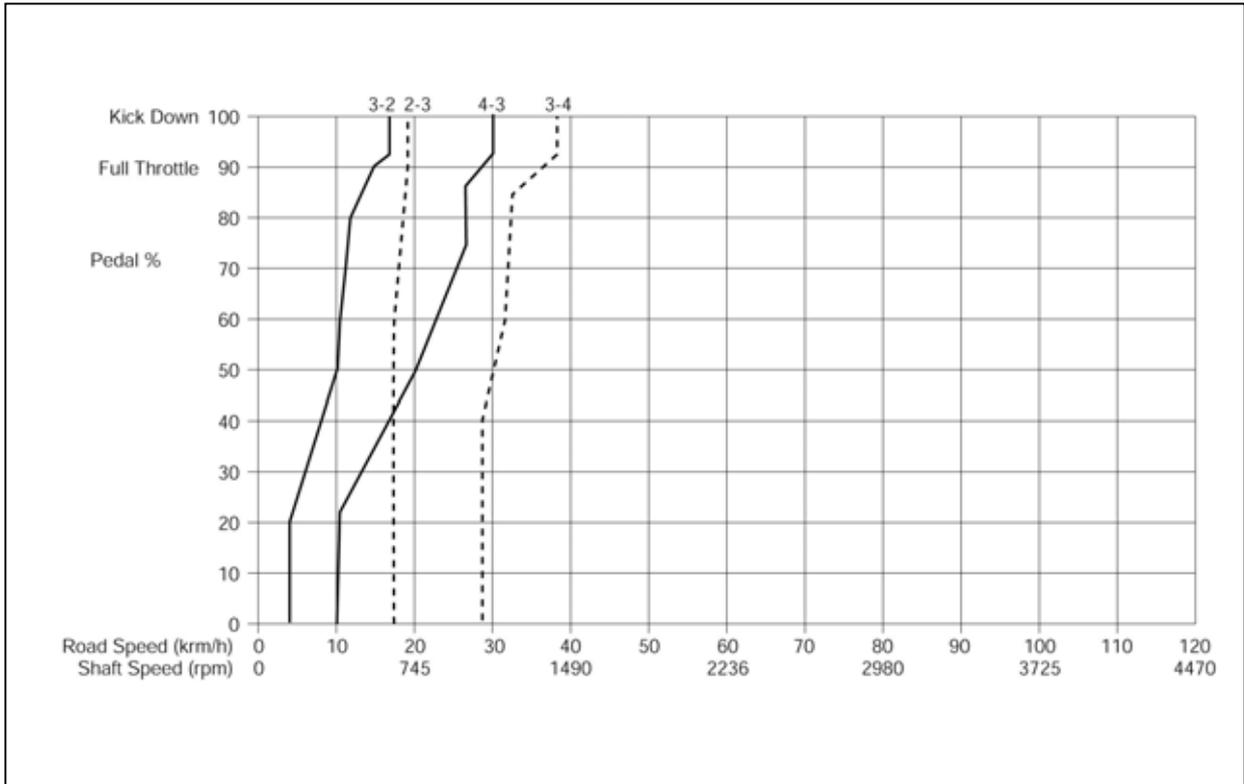
1. OM 662 LA (Normal Mode)



2. OM 662 LA (Power Mode)



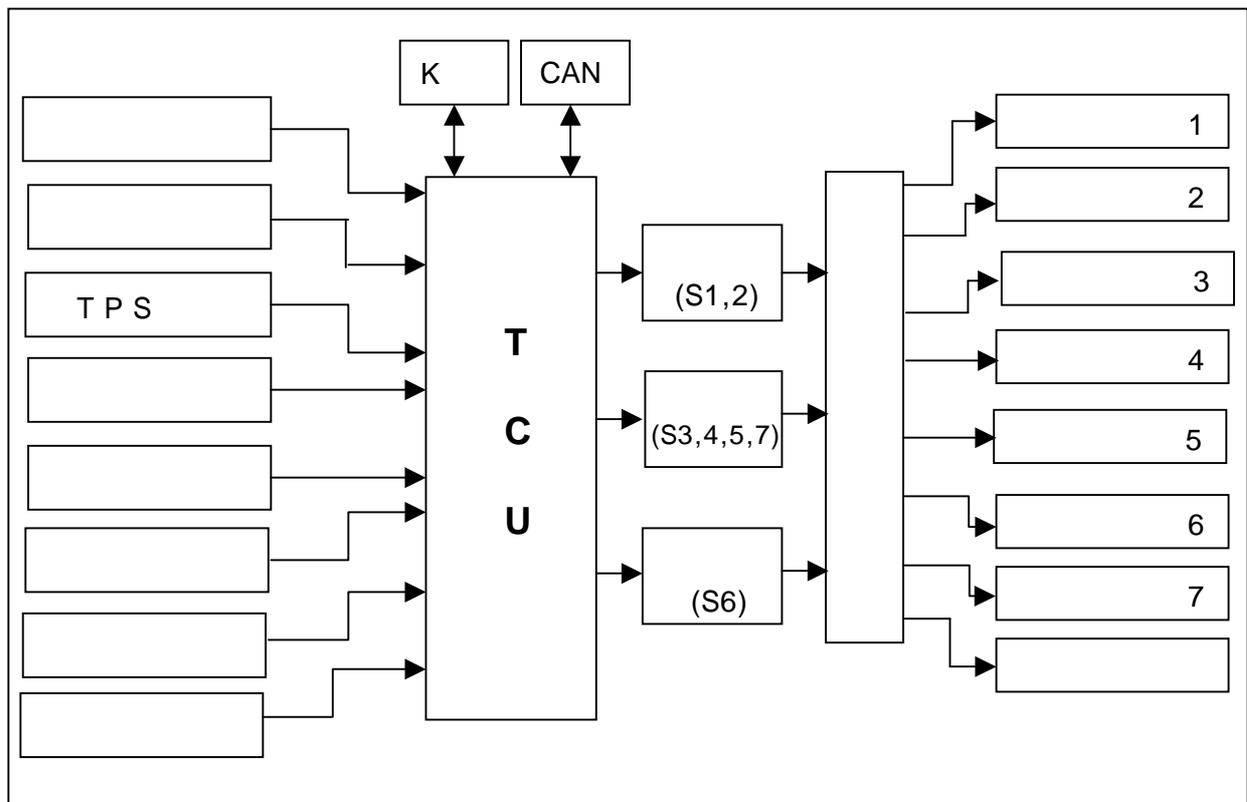
## 3. OM 662 LA (4WD Low )



4.

1.

TCU, ROM(Read Only Memory) TCU  
 TCU 7  
 7 6 , , "ON", "OFF"  
 1  
 가 (Variable Pressure Solenoid valve)



2. TCU (Transmission Control Unit)

TCU  
 -  
 - ( , , )  
 -가 (VPS), ON/OFF ,

1.

EPROM (Erasable Programmable Read Only Memory)  
 EEPROM (Electrically Erasable Programmable Read Only Memory) TCU

TCU

TCU

가

TCU

, 3 ,4 ,

가

TCU

-40 ~ 85

**1. TCU (Transmission Control Unit)**

TCU

가

ON / OFF

가

가

1. (RPM)

-가

:

ECU (Engine Control Unit)

CAN

(Controller Area Network)

TCU

-

:

TCU

2.

TCU

TCU, ECS,

■

(Drive)

가

(Driven)

3. (Throttle Position Sensor)

-가

:

ECU(Engine Control Unit)

CAN (Controller Area Network)

TCU(Transmission Control Unit)

-

: TPS

(Injection Pump)

가

가

TCU

TPS

3

(5V

TCU

-

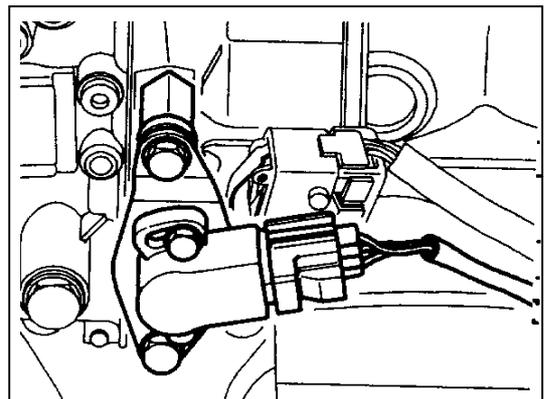
: 0.4 ~ 1.0V

-

(WOT)

: 3.0 ~ 4.5V

TPS



TPS

TCU

, TCU

1)

i  
i  
"ON"  
0.5V

2)

TCU

, TCU

(60~80 )

가

-OM 661 LA 800 ± 50 rpm

-OM 662 LA 770 ± 50rpm

"OFF"

"ON"

가

"D"

30

30

i

- : 0 %

- : 100%

4.

(Gear Position Sensor)

, P/N( )

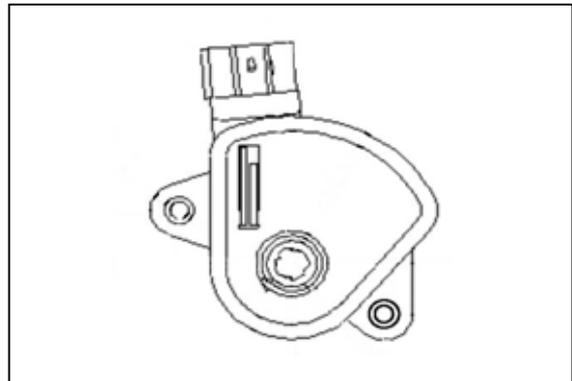
3가

• 가

•

•

TCU

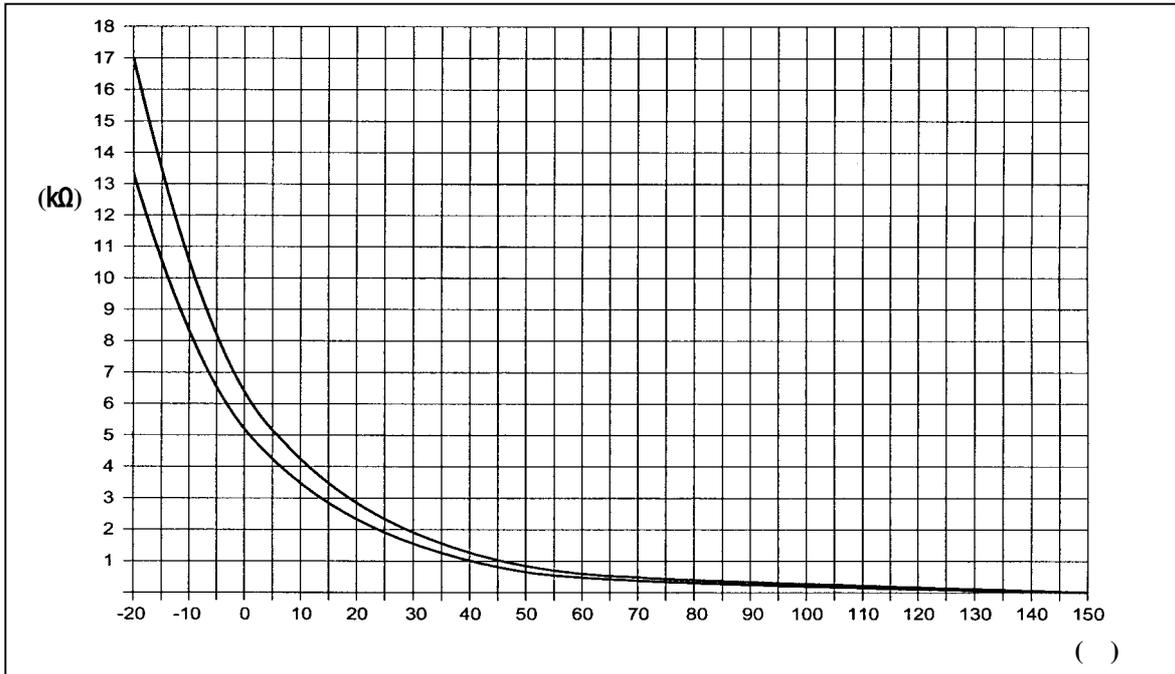


	(kΩ)	(V)		(kΩ)	(V)
1	1.0 ~ 1.4	1.0	N	6.8 ~ 7.2	3.0
2	1.8 ~ 2.2	1.5	R	10.8 ~ 11.2	3.5
3	3.0 ~ 3.4	2.0	P	18.6 ~ 19.0	4.0
D	4.5 ~ 4.9	2.5	—	—	—

( )

5.

가 TCU , NTC  
 ,  
 가 135 TCU “Power”  
 가



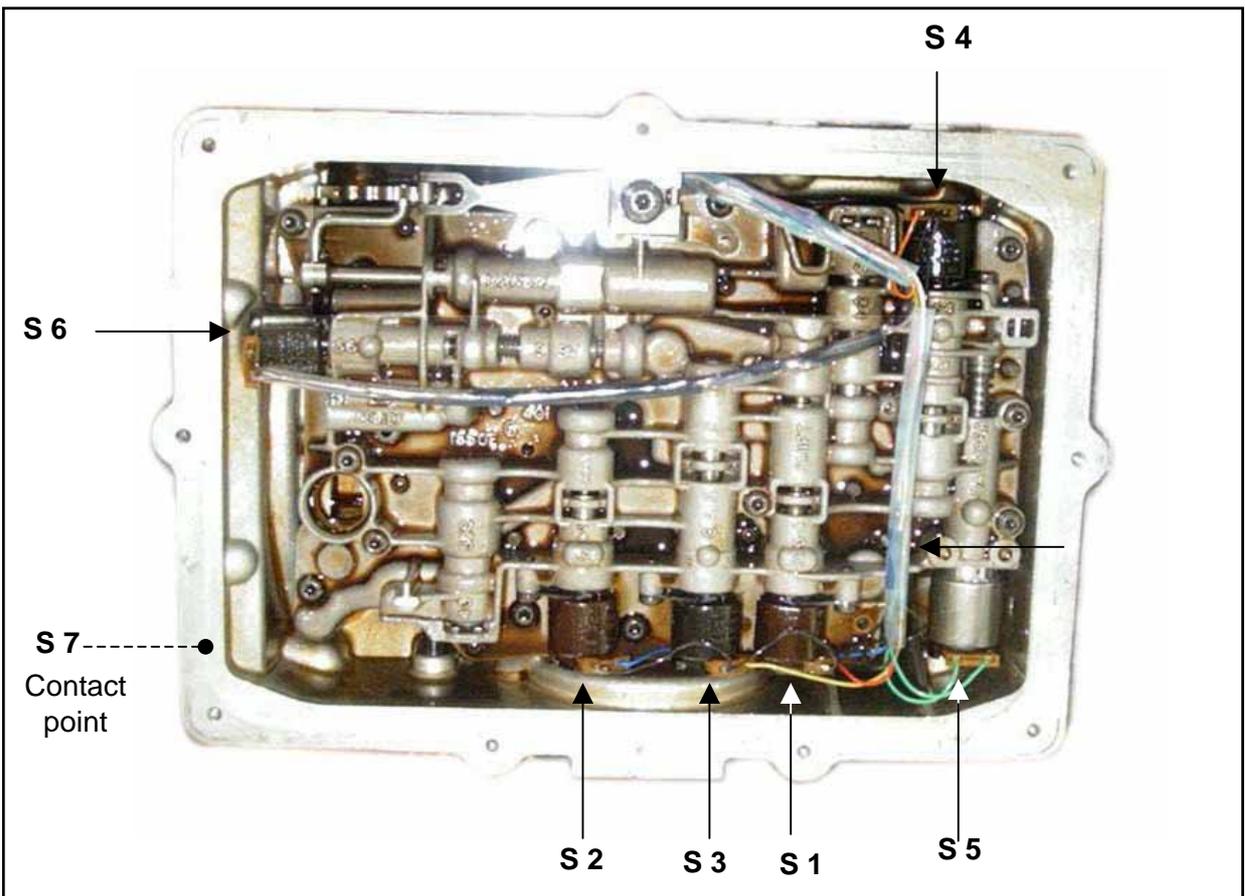
0	5,177 ~ 6,166
60	600 ~ 750
100	177 ~ 200

6.

“ON” TCU A30 + ,  
 8.9V , 1 2  
 (11~14V)  
 , TCU 3  
 16.5V TCU (Limp Home Mode)  
 TCU

**2. TCU (Transmission Control Unit)**

TCU 7  
 (S1~S6) S7



1. 1,2  
 S1, S2 NO(Normal Open) ON / OFF  
 S1 S2 ( )

# BTRA M74

	(S1)	(S2)
1	ON	ON
2	OFF	ON
3 / / /	OFF	OFF
4	ON	OFF

2.                    3, 4  
                          S3 S4                    NO(Normal Open)  
 ON / OFF                    .  
                          S3                    ,                    S4                    (B1)

3.                    5  
                                             가                    (VPS)  
                          ,                    TPS,                    ,                    ,  
                          가                    가                    .  
                          가                    가                    (S7),  
                          (S4),                    (S3)  
                          가                    가                    .  
                          가                    TCU                    가  
                          가                    200mA                    1000mA                    ,                    가                    가  
                          ,                    가                    가                    .

4.                    6  
                          S6 TPS                    /  
 NO(Normal Open)                    , "OFF"                    .

5.                    7  
                          S7                    NO(Normal Open)  
                          ,                    가 "ON"                    3                    4

3.

	( )	(S5)	( )
1 - 2	S1 OFF S4 ON	600 ~ 750mA	S4 OFF
1 - 3	S1 OFF S2 OFF S3 ON S4 ON	750 ~ 850mA	S3 OFF S4 OFF
1 - 4	S2 OFF S3 ON S4 ON	750 ~ 850mA	S3 OFF S4 OFF
2 - 3	S2 OFF S3 ON S4 ON	500 ~ 700mA	S3 OFF S4 OFF
3 - 4	S1 ON S4 ON	600 ~ 750mA	S4 OFF
4 - 3	S4 ON	750 ~ 900mA	S1 OFF S4 OFF
4 - 2	S3 ON	750 ~ 900mA	S1 OFF S2 ON S3 OFF
4 - 1	S3 ON S4 ON	600 ~ 1000mA	S2 ON S3 OFF S4 OFF
3 - 2	S2 ON S4 ON	450~600mA(20Km/h ) 450~550mA(60Km/h ) 650~800mA(100Km/h )	S4 OFF
3 - 1	S3 ON S4 ON	700 ~ 950mA	S1 : ON, S2 : ON, S3 : OFF, S4 : OFF
2 - 1	S4 ON	800 ~ 950mA	S1 ON S4 OFF
	S7 ON	400 ~ 700mA 100 ~ 600mA	S7 OFF

**5. ( Power Train System)**

1.

	C 1	C 2	C 3	C 4	B 1	B 2	1/2 OWC	3/4 OWC	
						●			
1 (2.741)		●		○			●	●	
2 (1.508)		●		○	●			●	
3 (1.000)	●	●		○					●
4 (0.708)	●	●			●				●
(2.741)			●			●			

○ :

**2. ( Clutch Packs)**

-C1

, 3

4

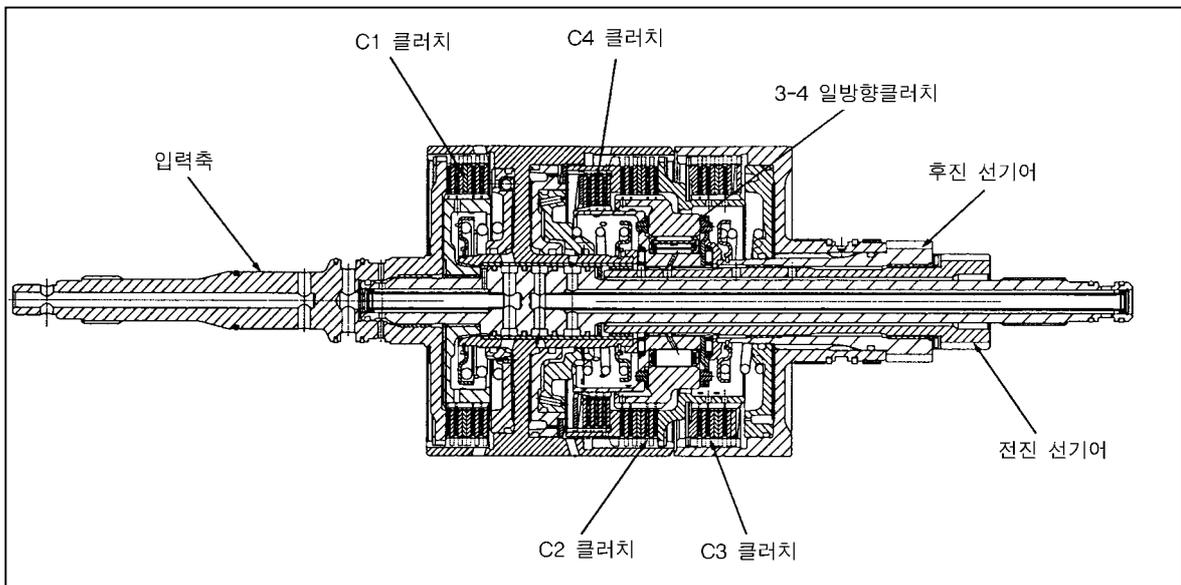
-C2

3 ~ 4

-C3

-C4

1, 2, 3



3.

B1 B2

-B1 , 2

4

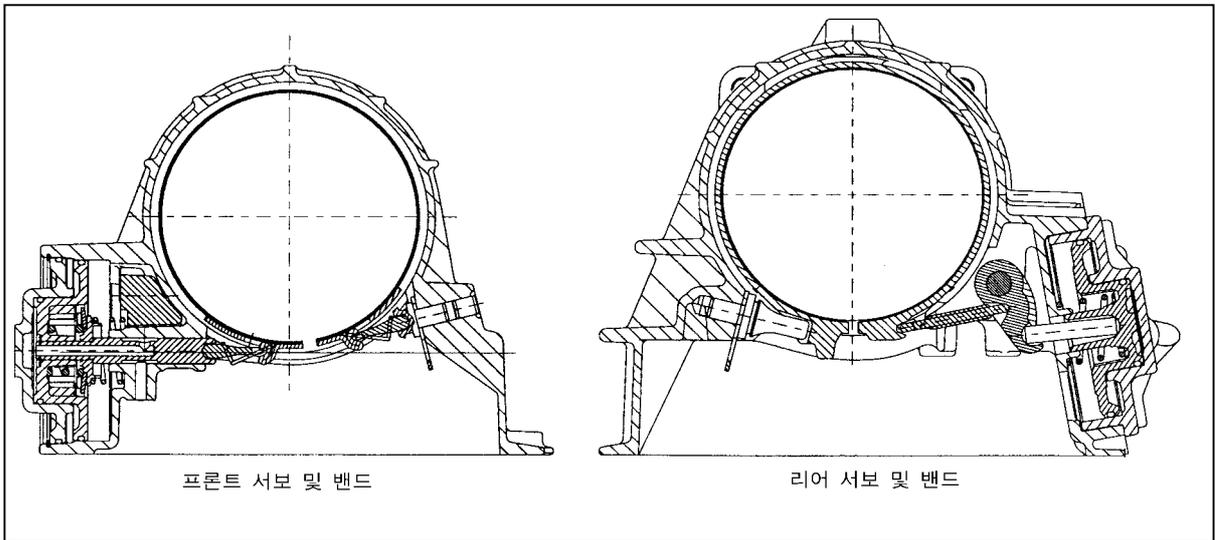
B1 C3 ,

2 , 4

-B2 P/R/N 1

가

1



4.

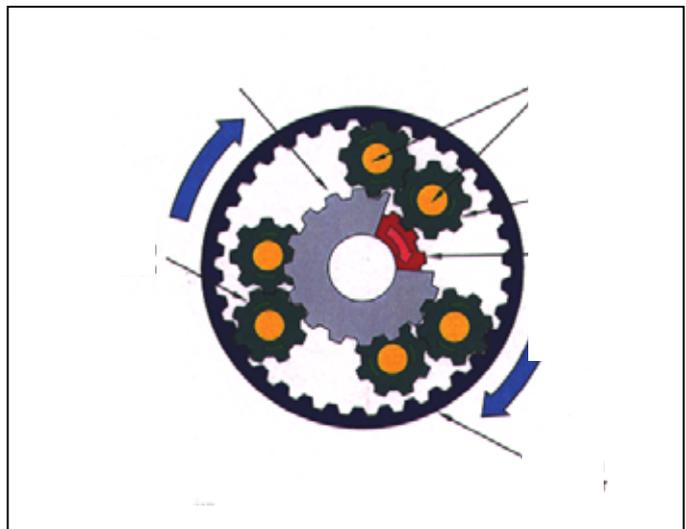
6

- : 2

- : 1

- : 1

- :



5.

1.

4WD

1.

- S1, S2 OFF

-

-

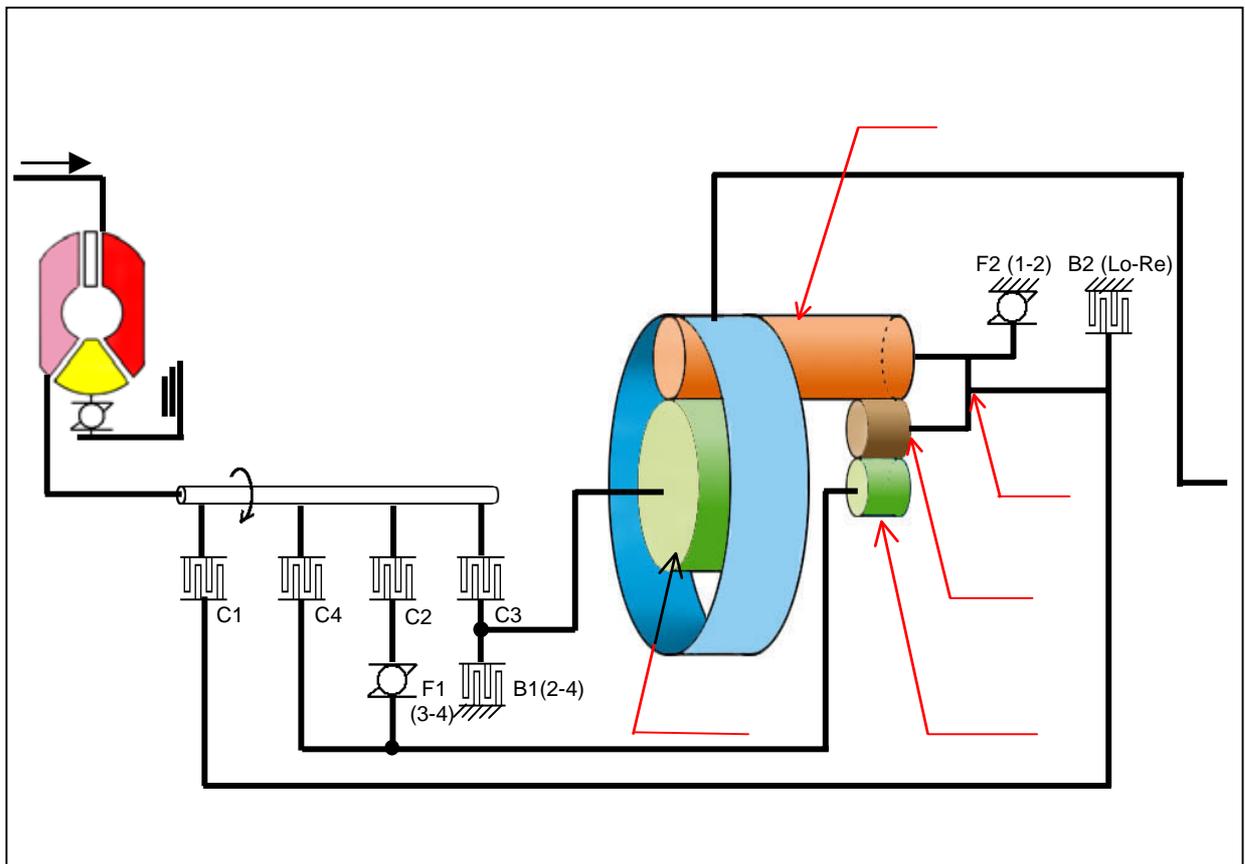
- ( ) D( ) 가

-B1 ( )

2.

	C 1	C 2	C 3	C 4	B 1	B 2	1-2 OWC	3-4 OWC	
	-	-	-	-	-	●	-	-	-

3.



2. 1

1 (C2)  
 -C2  
 -  
 -  
 -1-2 가 가  
 가  
 -

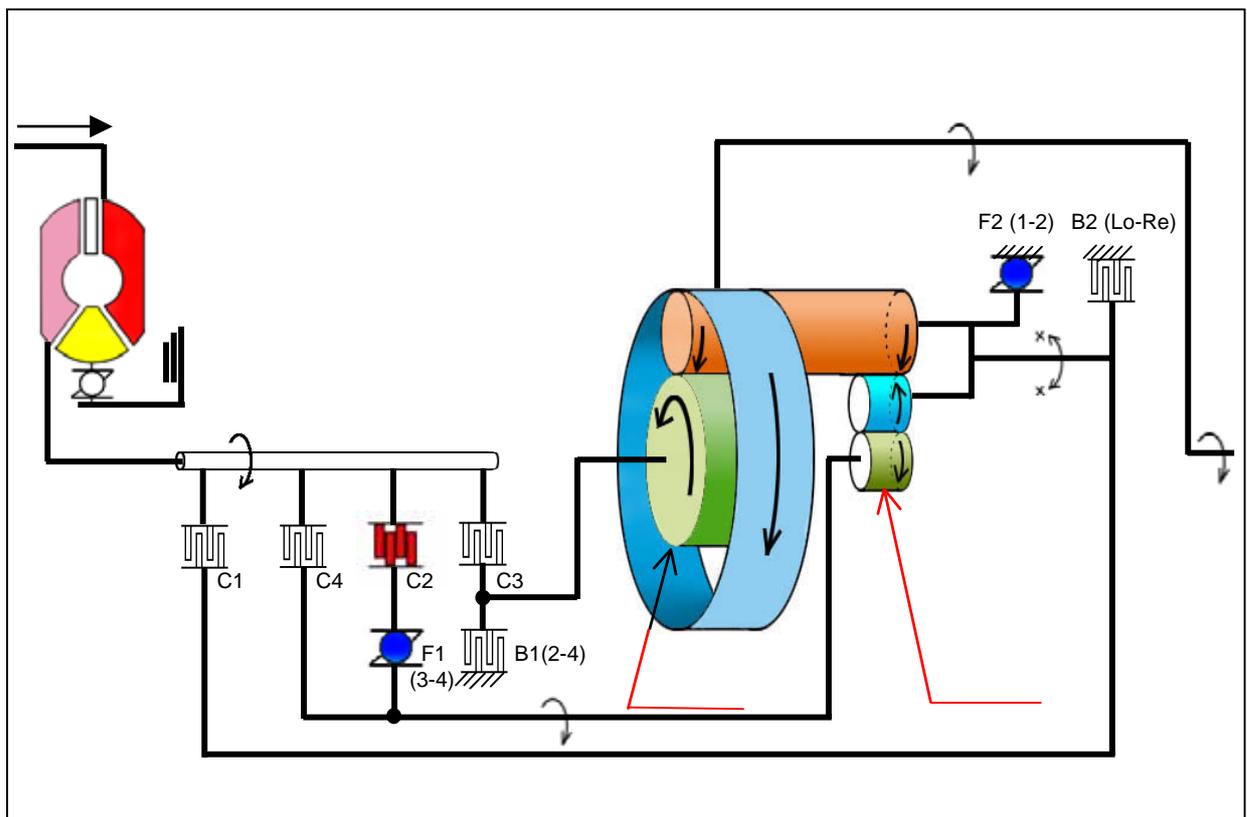
1. 1

1  
 - S1 S2 "ON"  
 -1-2, 2-3 3-4 1  
 - C2

2. 1

	C 1	C 2	C 3	C 4	B 1	B 2	1-2 OWC	3-4 OWC	
1	-	●	-	-	-	-	●	●	-

3. 1







# BTRA M74

5. 4 ( )

4 (C2)

- C1

-B1

- 가

- , 3-4

1. 4

- S1 "ON" , S2 "OFF"

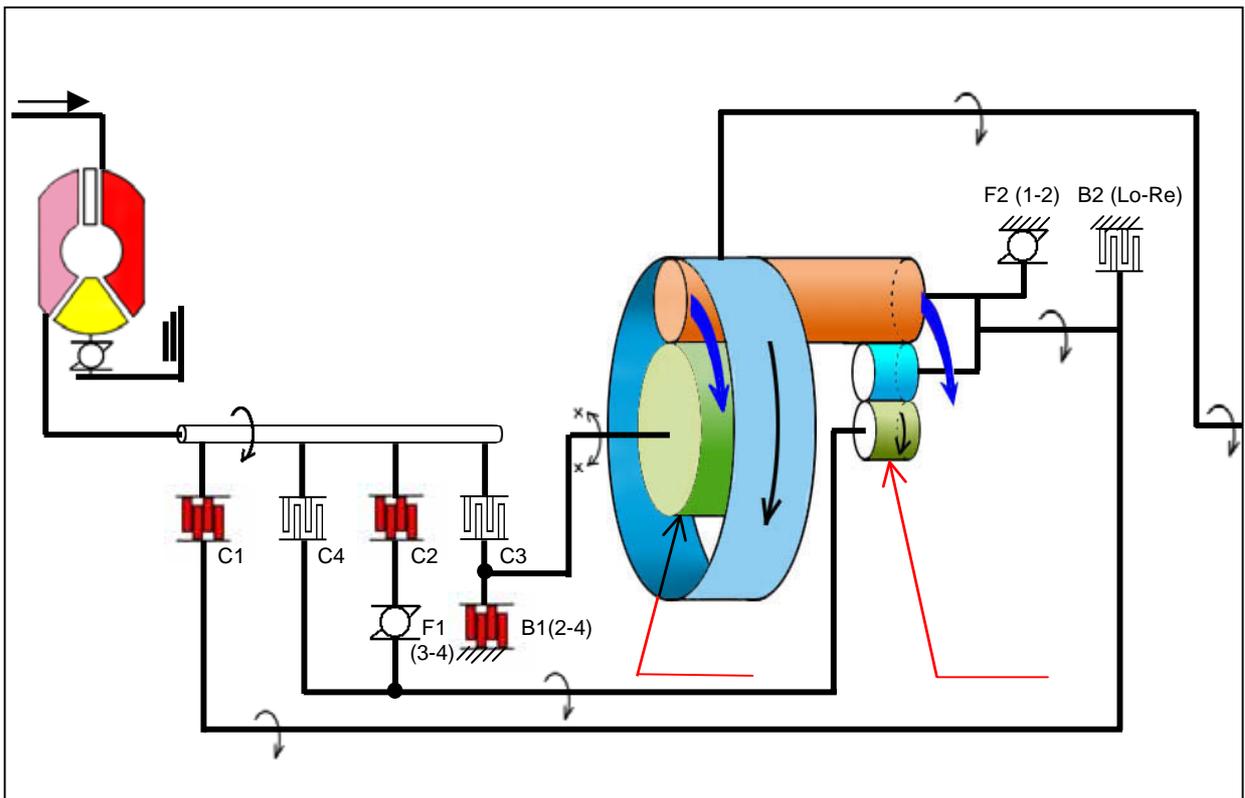
-S1가 "ON" 3-4 4

-S2가 "OFF" 2-3 4

2. 4

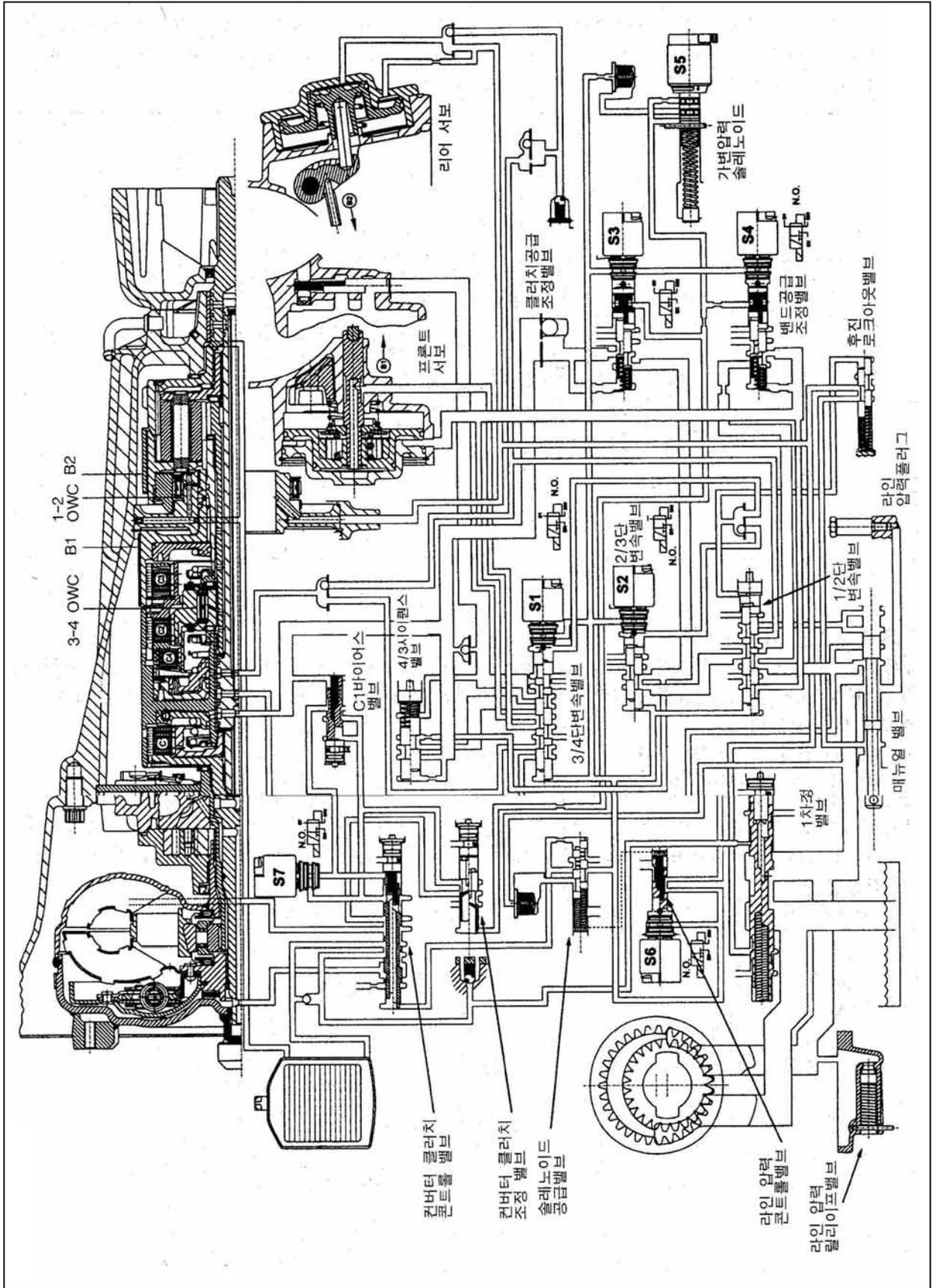
	C 1	C 2	C 3	C 4	B 1	B 2	1-2 OWC	3-4 OWC	
4	●	●	-	-	●	-	-	●	-

3. 4





6.



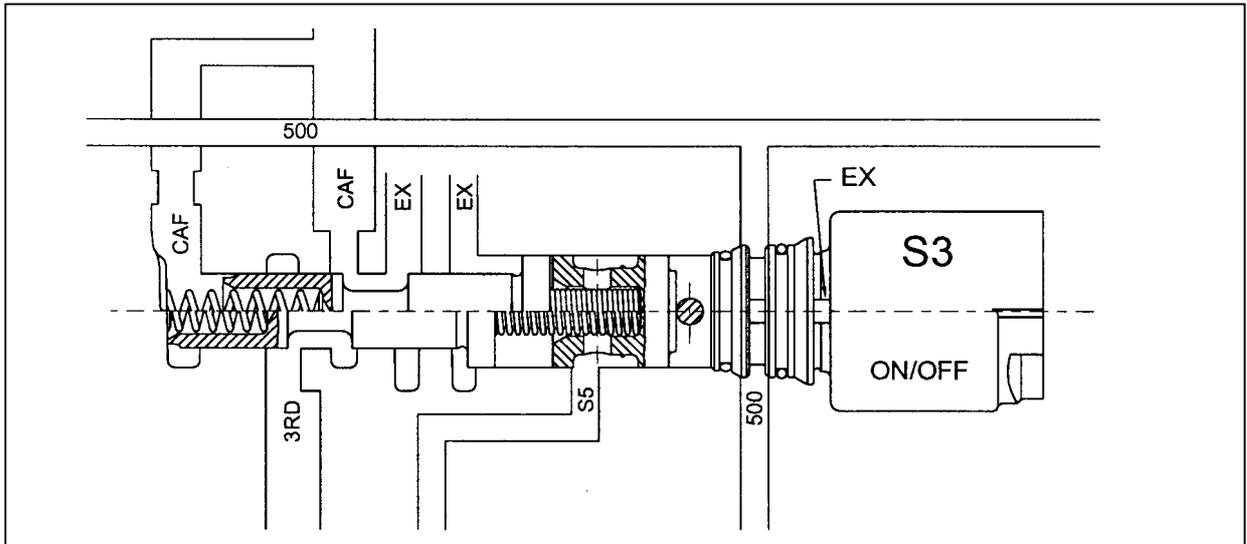




5. ( Clutch Apply Regulator Valve)

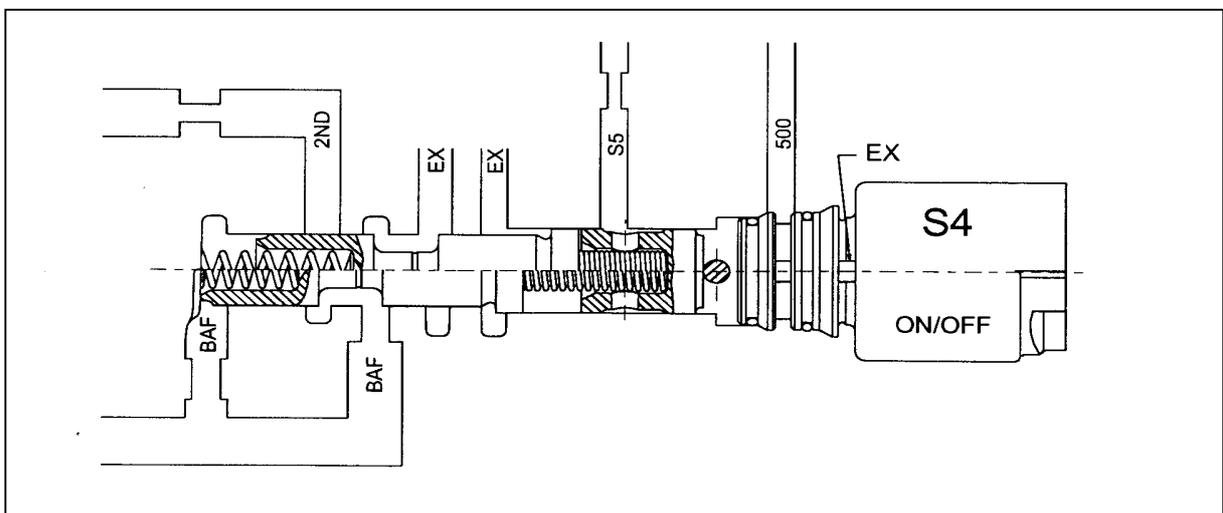
C1

3 (S3)가 ON (S5)  
 2.25 (S3) OFF 2.25 (500)



6. ( Band Apply Regulator Valve)

2 (S4)가 ON (S5)  
 1.4 (S4)가 OFF 1.4 가

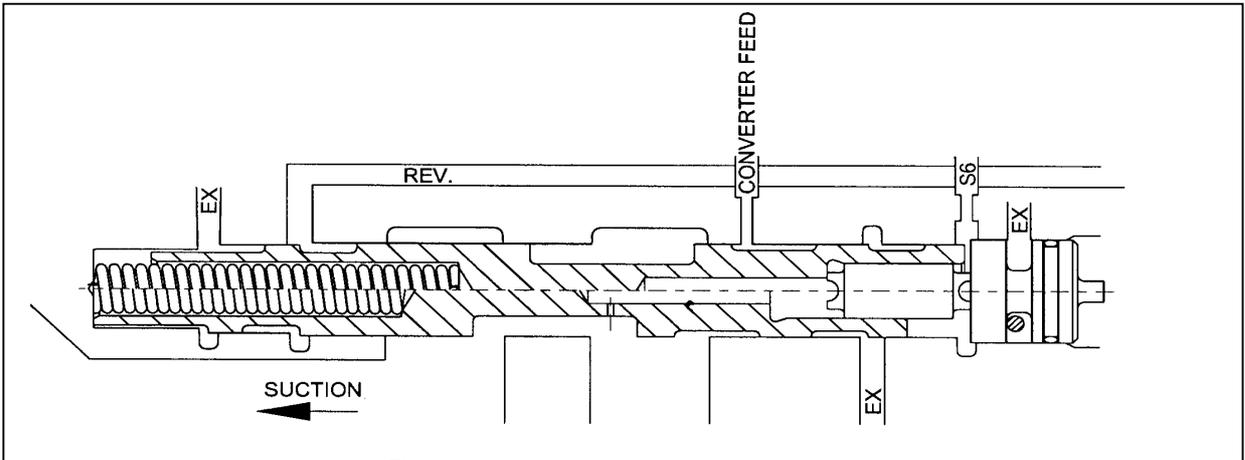




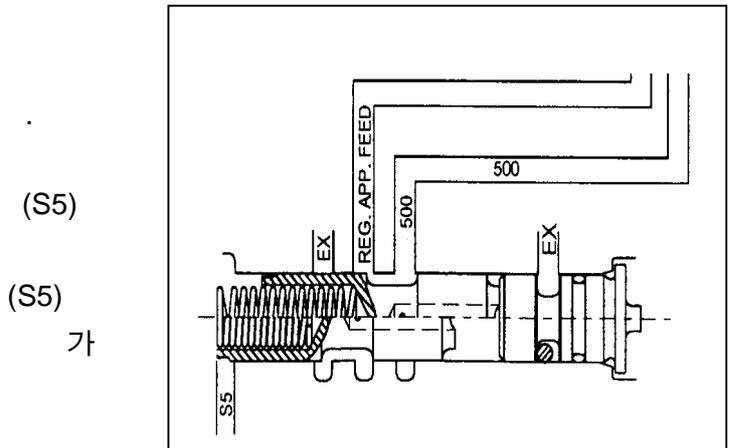


**10. ( Primary Regulator Valve )**

(PRV) ( )  
 (S6)가 ON/OFF  
 (S6) ON  
 가  
 가 (S5)  
 가 2 ,  
 , PRV PRV  
 , PRV PRV  
 가 가 가 PRV  
 가 PRV



**11. (Converter Clutch Regulator Valve)**

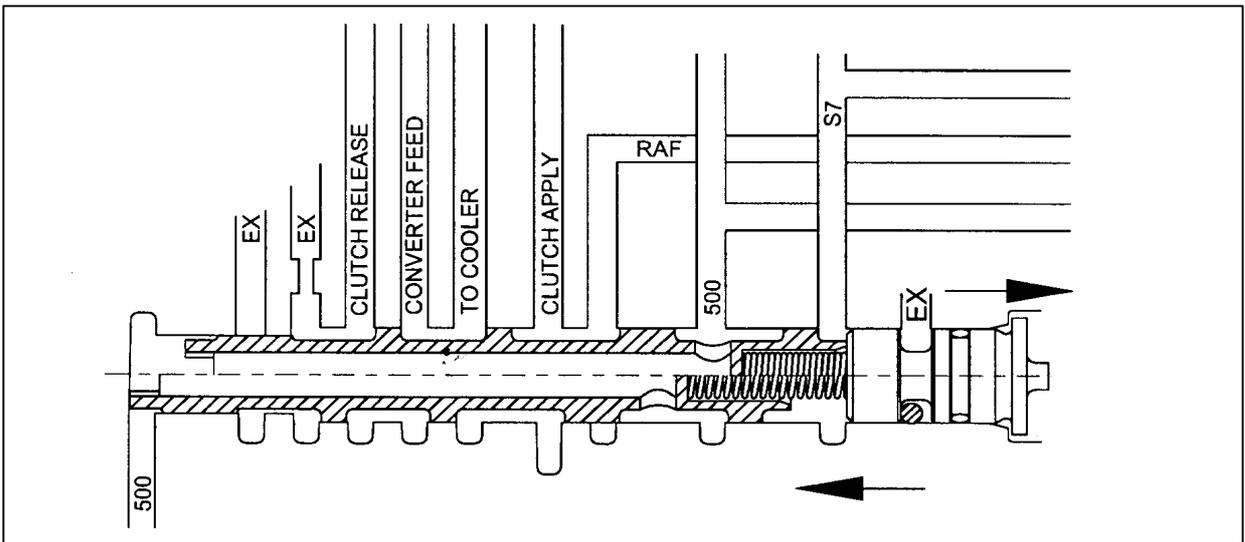


12. ( Converter Clutch Control Valve)

2

(S7)

- 가 OFF
- 가 ON



13. C1 ( C1 Bias Valve)

C1

3 4

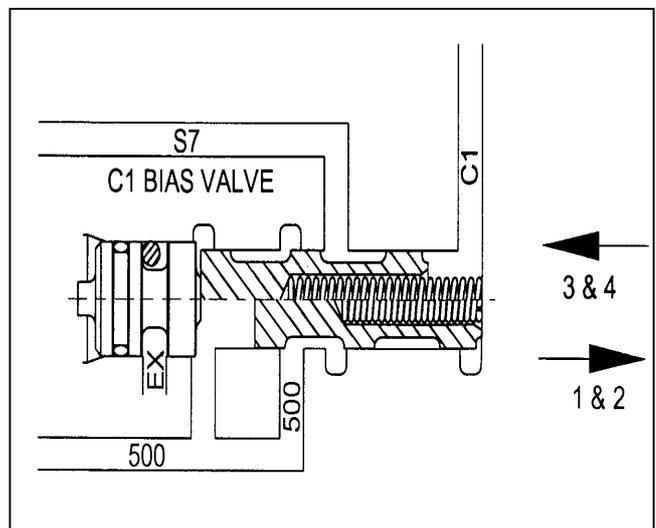
C1

(500)

C1  
(S7)

(S7)

가



**14. B1R ( B1R Exhaust Valve)**

B1R

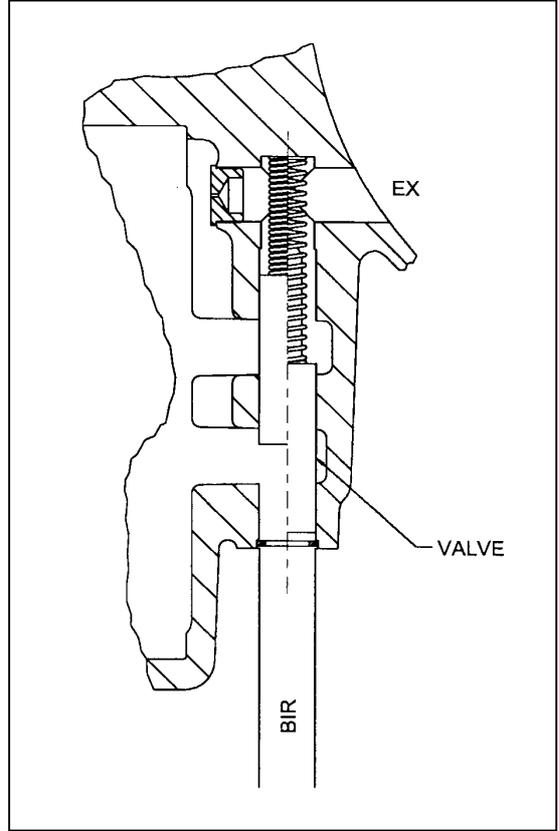
2

(B1)

3-4

100kg/cm<sup>2</sup> 가

B1R



8.

1.

1.

- (B1) 6.5 ~ 7.0Kg/cm<sup>2</sup>  
 - 3mm

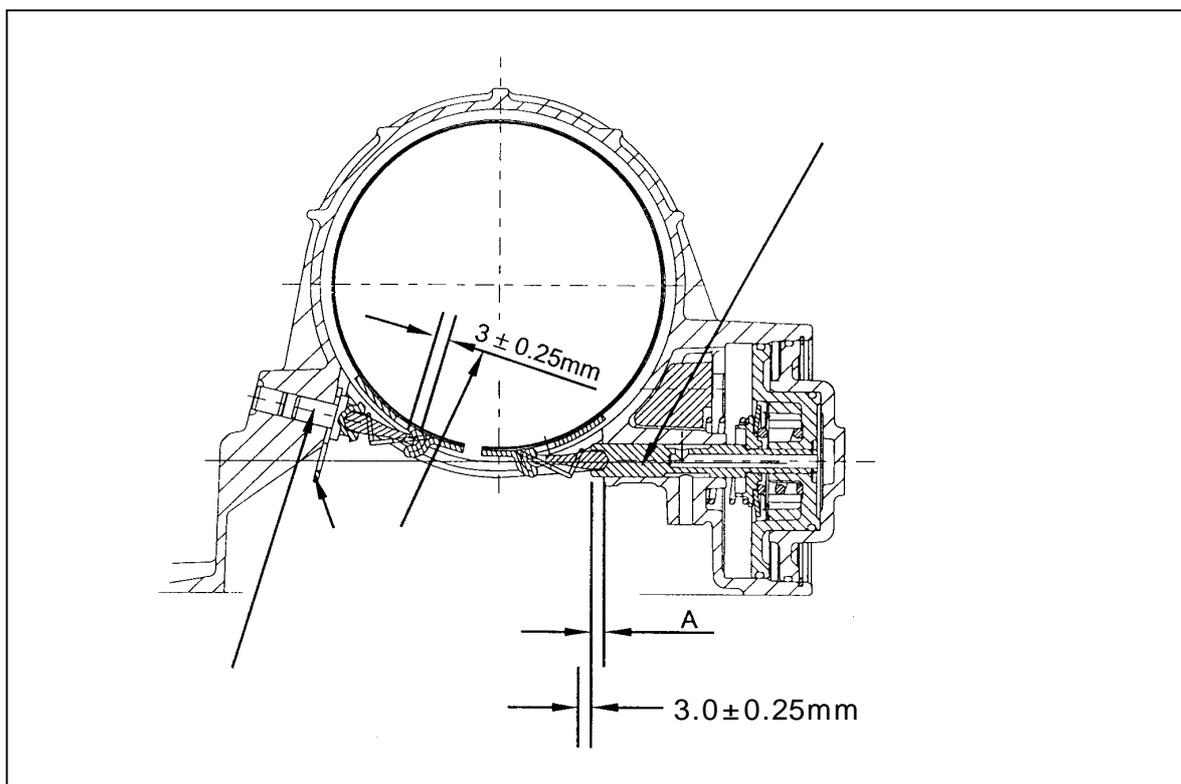
2.

- ,  
 - .  
 - .  
 - 가

) 0.95mm

0.95 / 1.05	0574 - 037017	1.93 / 2.07	0574 - 037021
1.15 / 1.25	0574 - 037018	2.12 / 2.28	0574 - 037022
1.44 / 1.56	0574 - 037019	2.42 / 2.58	0574 - 037023
1.73 / 1.87	0574 - 037020	2.61 / 2.79	0574 - 037024

3. 3 ± 0.25mm가



2.

1.

“A”

- (B2)

6.5~7.0Kg/cm<sup>2</sup>

3.75mm

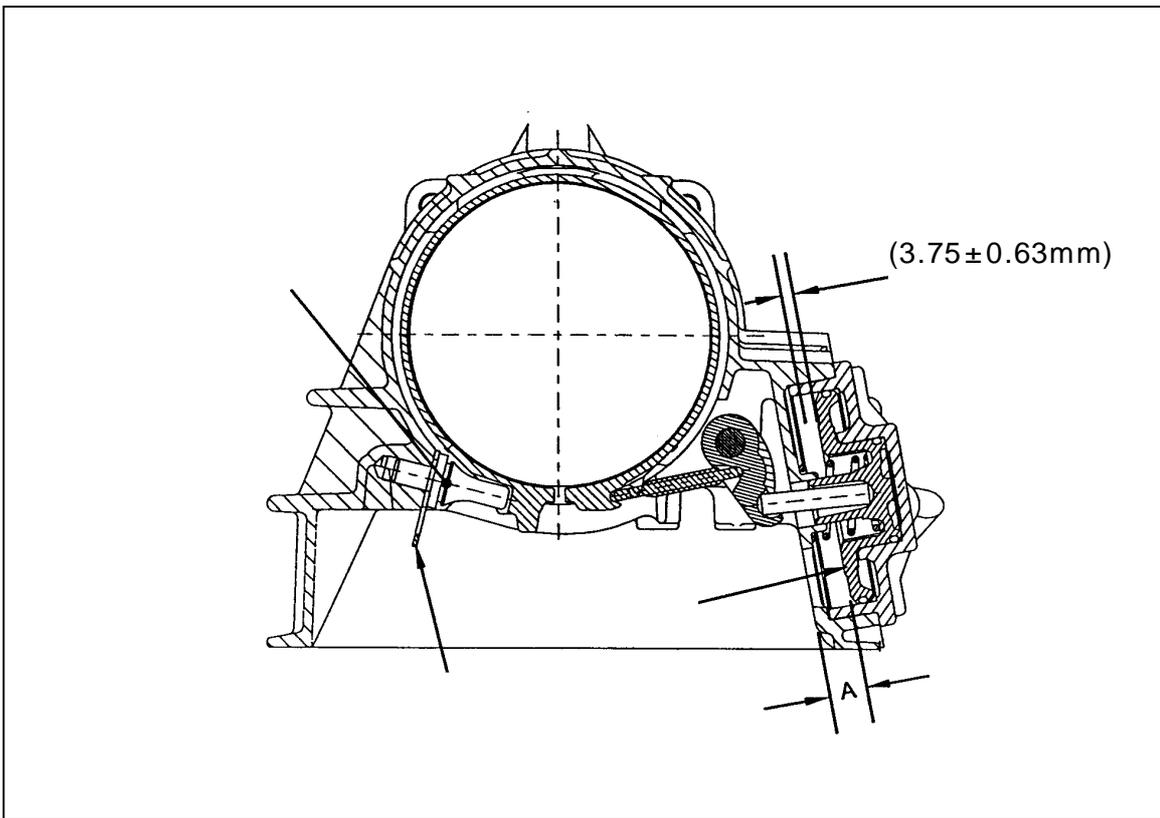
2.5

2.

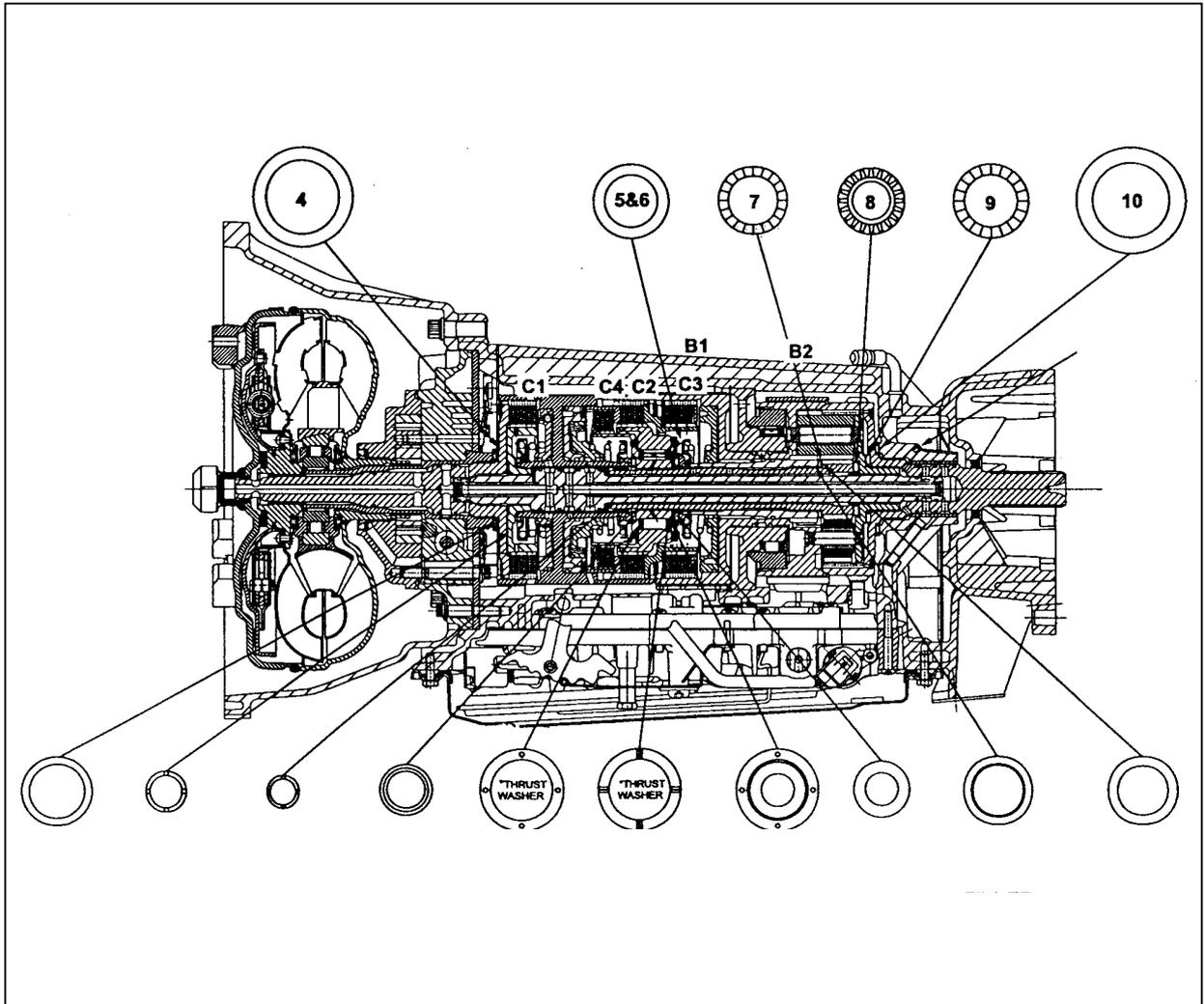


3.

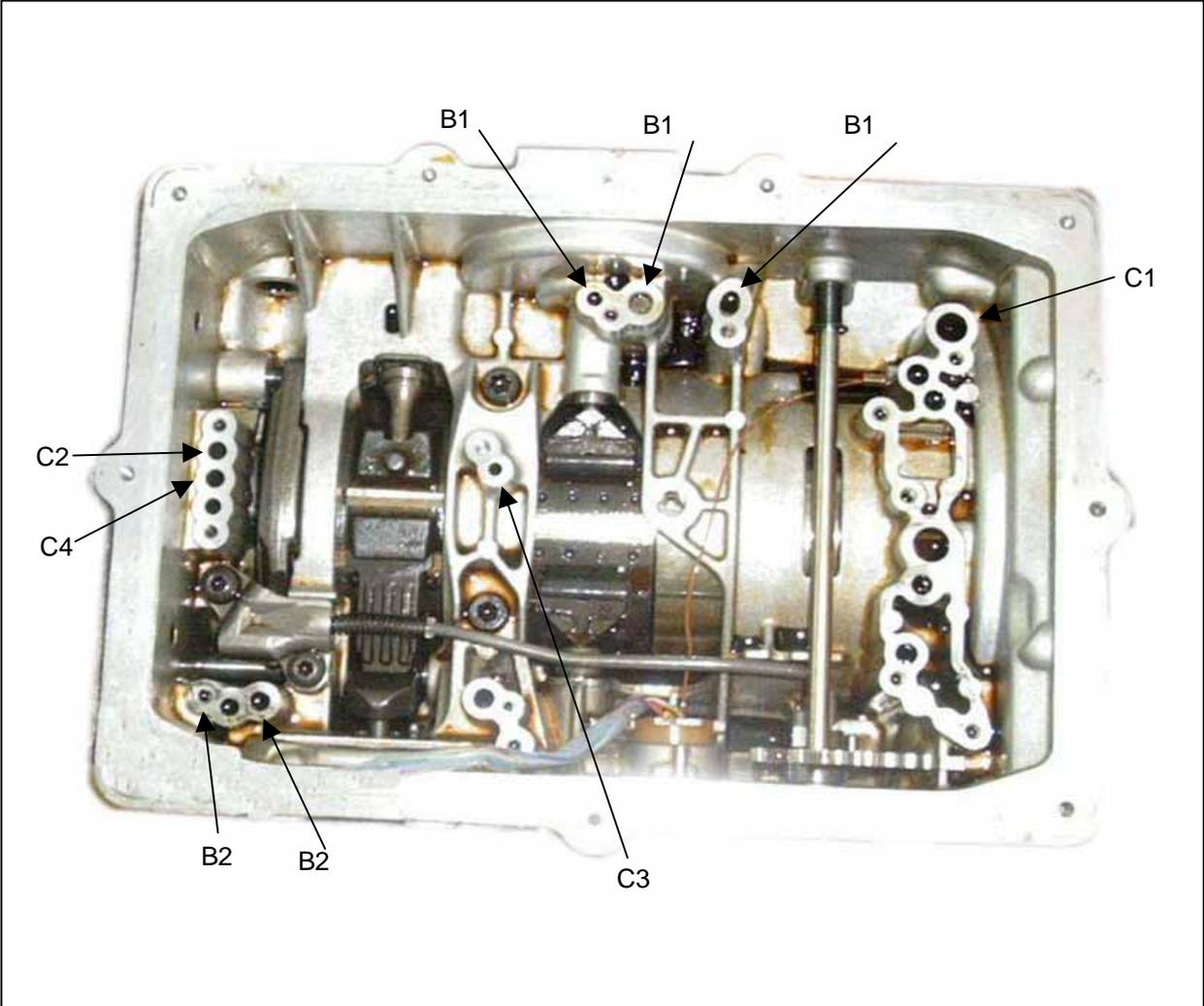
3.75 ± 0.625mm가



9.

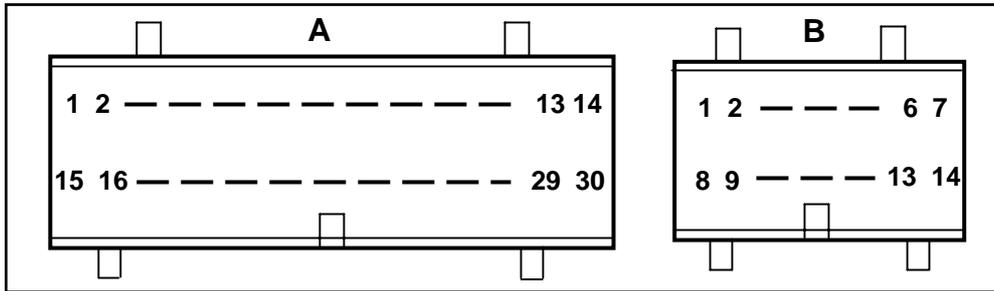


**10.**



# 11. TCU

## 1. TCU



			4WD ( )	4WD (가 )	
A 1	4WD HIGH	—	●	●	- 4WD HIGH
A 3			●	●	- WOT
A 4			●	○	-
A 6			●	●	- P,W, 0 ~ 5V
A 7			●	○	-
A 9			●	●	-
A 10			●	●	-
A 11			●	●	-
A 12	Winter		●	●	- WINTER
A 14			●	●	-
A 15	4WD LOW		●	●	- 4WD LOW
A 16	TPS		●	○	- 0 ~ 5V 가
A 17	TPS		●	○	- TCU 5V
A 18	TPS		●	○	-
A 19			●	○	-
A 21			●	○	-
A 22		,	●	●	-
A 23	CAN ( + )	,	○	●	- CAN HIGH
A 24	CAN ( - )	,	○	●	- CAN LOW

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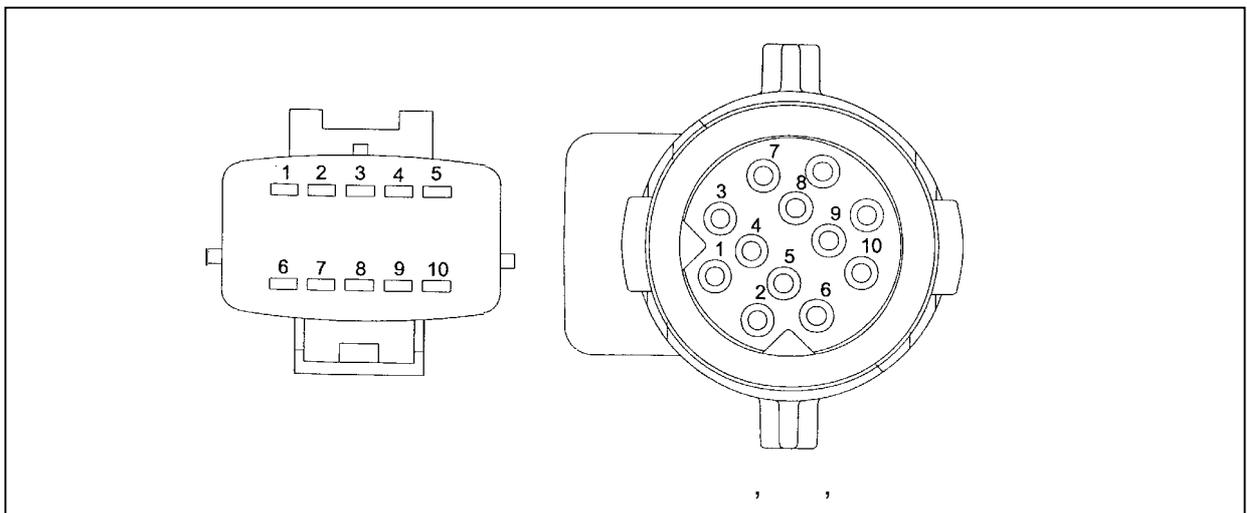
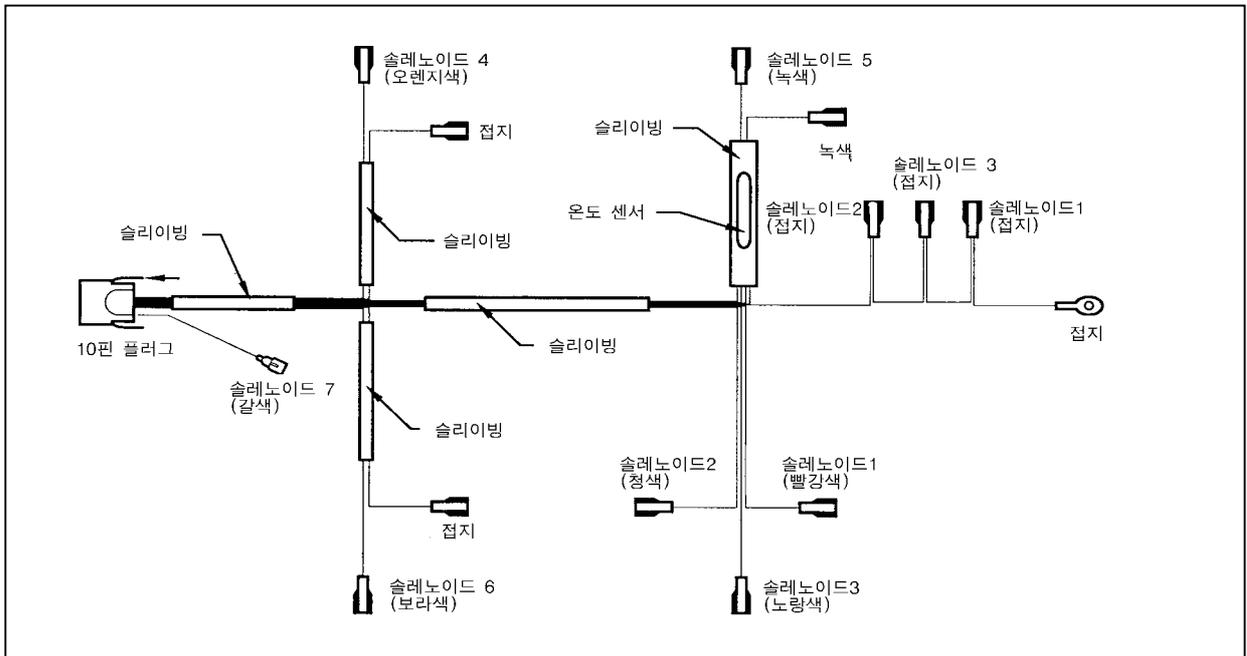
			4WD ( )	4WD (가 )	
A 25	D		●	●	- D
A 26	3		●	●	- 3
A 27	2		●	●	- 2
A 28	1		●	●	- 1
A 30			●	●	-
B 1	5		●	●	- VPS
B 3	1		●	●	-
B 4	4		●	●	- S3
B 5	T /M		●	●	- 0 ~ 5V 가
B 6			●	●	- 0 ~ 5V 가 ( )
B 7	5		●	●	- 가
B 9	7		●	●	-
B10	3		●	●	- S4
B11	2		●	●	-
B12	6		●	●	-
B13	T/M		●	●	-
B14			●	●	-

● :

○ :

2. 10

10



1			1	6	6
2			2	7	7
3			3	8	5
4			4	9	
5			5	10	

**12.**

**1.**

TCU

. TCU

1. ( ): **100%**

- ( 44%)

-

-

-

-

(WOT)

(S6 "OFF")

3 - 1

가

2. : /

100%

6 "OFF"

-

-

가

3. : 가 **2000rpm**

-

"D"

4. : **5000rpm**

- , ( :1-3 3-1 )

3

-

(OFF)

1

5. : "D"

-

"D"

-

2

3

- 가 "P, R" " N" .
- (OFF) .
- ( ) 가 .

**6. :120**

- (120 ) 가 가
- 가 .
- "D" .

**7. : "Normal"**

- "Normal"
- 
- 

**8.**

- (8.9V ) 1 .
- (16.5V ) 3 .
- , "ON / OFF" .
- (Limp Home Mode ) .

**9. ON / OFF ( S1, 2, 3, 4 )**

- (S1)가 , TCU 3 .
- (S2)가 , TCU 3 .
- (S3,4) , ( ) .
- ) .

**10. ON / OFF (S 6, 7)**

- (S6)가 ,
- (S7)가 ,

**11. 가 ( S 5)**

- (3 ) .
- ,

**12. TCU**

TCU 3 ,

**13.**

3 .  
3 ~30  
,

**14.**

(135 )  
- "Power"  
-

2. ON / OFF

		( )
1	ON	- 1 4 ( 2,3 )
	OFF	- 1 2 3
2	ON	- 1 2 2 1
	OFF	- 3 4 .
3	ON	- ( 3-4 / 4-3 / 3-2 )
	OFF	- ( 1-3 / 1-4 / 2-1 / 2-3 / 2-4 / 4-1 )
4	ON	- ( 2-4 / 3-2 )
	OFF	- ( 1-2 / 1-3 / 1-4 / 2-3 / 2-4 / 3-1 / 3-2 / 3-4 / 4-1 / 4-3 ) :
6	ON	-
	OFF	-
7	ON	- 3 ,4 ,
	OFF	- 가

**3.**

1		- T C U
2	T C U	- T C U
3		- 16.5V TCU가 - 8.9V TCU가
4		- TCU - TCU 가 ' . 0V 5V
5		- 10 TCU - ( TCU 0V 5V )
6	( )	- ( ) - TCU 0V 5V
7		- 가 - 가 - 가 TCU
8	( )	- 가 - 가 TCU -
9		- 가 ( , )

10		
11	ON/OFF (S1,2,3,4,6,7)	<p>OFF , 100<math>\mu</math>s ON .</p> <p>가 100<math>\mu</math>s , .</p>
12	(가 5 )	<p>(S5) 가 .</p> <p>(S5) TCU</p> <p>TCU</p>
13		<p>가 .</p> <p>가 .</p> <p>TCU</p>

4.

1.

- 
- 
- 
- 
- 

TCU

2.

가

- 
- 

2

3. D ( )

“D”	<ul style="list-style-type: none"> <li>-</li> <li>- C1,C2</li> <li>- 1 (PRV)</li> <li>- 1-2, 3-4 가 ( )</li> <li>- C2</li> </ul>	<ul style="list-style-type: none"> <li>-</li> <li>- C1, C2</li> <li>- PRV</li> <li>-</li> <li>-</li> </ul>
<ul style="list-style-type: none"> <li>“R”</li> <li>- M1</li> <li>- M1</li> </ul>	<ul style="list-style-type: none"> <li>- C3, B2</li> <li>-</li> <li>- C3 C1,C2</li> </ul>	<ul style="list-style-type: none"> <li>- C3, B2</li> <li>-</li> <li>- C1,C2,C3</li> </ul>
<ul style="list-style-type: none"> <li>“D”</li> <li>“R”</li> </ul>	<ul style="list-style-type: none"> <li>- 1</li> <li>-</li> <li>-</li> </ul>	<ul style="list-style-type: none"> <li>- 1</li> <li>-</li> <li>-</li> </ul>

4.

- 2-3 가 (1,4 )	- S1 OFF ( )	- S1 (27± 2 ) - ON 12V
- 1- 4 가 - 1-3- 4 가 (1-2 )	- S1 ON ( )	- S1 (27± 2 ) - ON 12V
- 3-4 가	- S2 OFF ( )	- S2 (27± 2 ) - ON 12V
- 1-2-N (1 )	- S2 OFF ( )	- S2 (27± 2 ) - ON 12V
- 1-3 가	- B1 - B1 - - S1,S2	- - - -
- 1-3-4 가	- - 1-2	- - 2-3
- 1-2-1 가	- 3-4 C1 ( 3 1 , 4 2 )	- C1
- 4-3, 3-2, 2-1	- - C4 C4	- - C4 C4

- 1	- 1 - C4	- 1 - C4
- 1 2 , 3 , 4	- 1-2	- 1-2
- 1 , 2 1 , 3 4	- 1-2 ( ) - 2-3	- - 2-3
- 1 , 2 , 4 1 , 2 , 3	- 3-4	- 3-4
- 2-3	- B1 - S3,S2 - -	- - S2,S3 - -
- 3-4	- S4 S1 - B1 - - - 가 -	- S4 S1 - - - - S5 ( 4.5±0.2 ) -

5.

-	- - (S5) -	- - (S5) -
-4-3-2-1	- / 1 - C4 , , C4 - C4	- - C4 - -
- 1-2	- (S5)	- S5 ,
- 4 (Tied Up)	- C4 - C4 - C2 (C4 )	- , - C4 - C2
- 2-3 (Tied Up)	- - - B1R	- - - B1R
- 2-3	- B1R / - C1 / B1R - C1 ,	- - C1 / B1R - C1
- 4	- C1 / B1R - - C1	- - -

**BTRA M74**

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-4-3 3-2	-4 - 3                   가	-
-	-       - 1	-
-       1-2	- - - - 가  -                   1,4 - - -	- - - - - - -
-	-  (CCCV)	- CCCV
-  (1,2 )	-                   (S7)	-

6.

- C2	- 6 (LOW ) - / - C2	- S6 - C2 - C2
- C4	- C4 - C4 - C4 - / - C2 - / 1	- C4 , - C4 , - - - C4 C2 - 1
- B1	- B1R - - C1 / B1R	- C1 - - B1 ,
- C1	- B1R - / - C1 - 4-3 - (CAF)/B1R	- C1 - C1 - C1 - - C1
- 1	- - 1	- -
-	-	-

**13.**

**1.**

i

가

**2.**

Castrol TQ 95

가 50 ~ 60 가

1. 30 ~ 60 가 , 가 ,

2. "P" P ~ 1 2 ~ 3

3. 15 ~ 30

4. (30 ~ 35Nm)

**3.**

1. "P"

2.

- : 10.0

- : 4.5

3. "P~1" 2 ~ 3

4. 0.5 가

5. 가 2,500rpm 3.5 ~ 4.5Km/h

( 50 ~ 60 )

6. "P ~ 1" 2 ~ 3

7. 15 ~ 30

8. 6

9.

14.

	155 589 22 62 57
	155 589 33 20 83
	155 589 33 28 95
	155 589 33 62 56
( )	155 589 33 62 58
	155 589 33 62 59
	155 589 33 62 60
	155 589 33 62 61
	155 589 33 62 62
가	155 589 33 62 63
( )	155 589 33 62 65
	155 589 33 62 66
	155 589 33 62 67
	155 589 33 62 68
	155 589 33 62 68
	155 589 33 62 70
	155 589 33 62 94
가	155 589 33 63 02

# BTRA M74

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15.

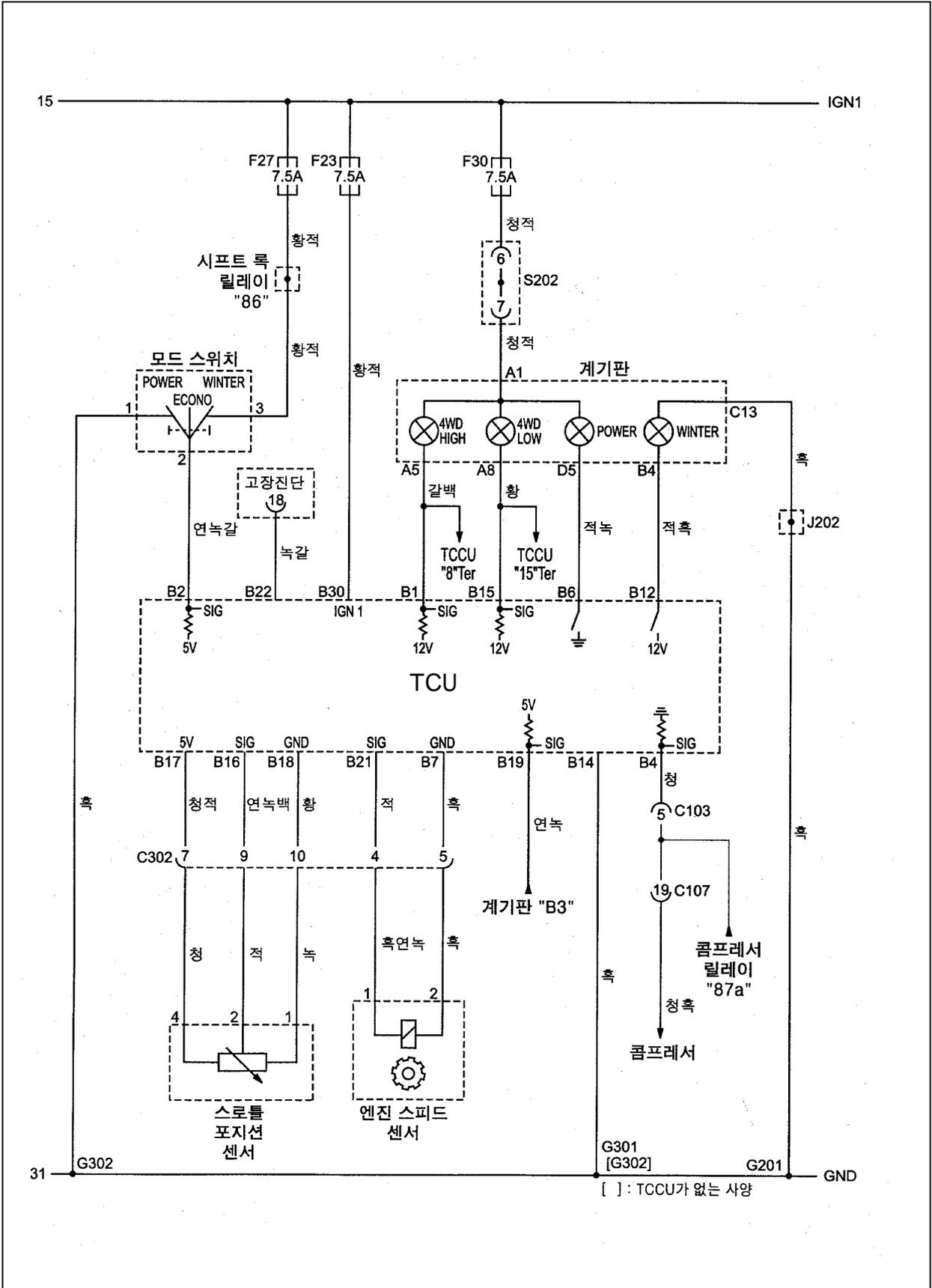
	Nm
	54 ~ 68
	54 ~ 68
	25 ~ 35
	2.3 ~ 3.4
	4 ~ 6
	30 ~ 35
	30 ~ 35
	100 ~ 110
	20 ~ 27
( )	16 ~ 22
	8 ~ 13
	11 ~ 16
ON / OFF	8 ~ 12
가	8 ~ 12
	4 ~ 7
	20 ~ 22
	24 ~ 34
	13 ~ 16
	24 ~ 27
	13 ~ 16
	25 ~ 35

[memo]

16.

1.

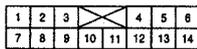
1. , , ,



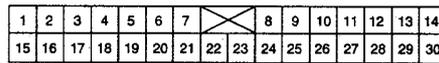
가. 와이어링 하네스 커넥터 및 접지 안내

커넥터 (단자수, 색상)	연결배선 명칭	커넥터 및 접지 위치
C103 (22 핀, 백색)	엔진룸 휴즈 & 릴레이 박스 - W/H 메인	엔진룸 휴즈 & 릴레이 박스
C107 (8 핀, 무색)	엔진룸 휴즈 & 릴레이 박스 - W/H 엔진룸	엔진룸 휴즈 & 릴레이 박스
C302 (10 핀, 흑색)	W/H 메인 - W/H 변속기	트랜스퍼케이스 위
S202 (20 핀, 흑색)	W/H 메인	계기판 뒤
J202	W/H 메인	계기판 뒤
G201	W/H 메인	전방 좌측 레그룸 상단
G301	W/H 메인	운전석 시트 아래
G302	W/H 메인	센터 콘솔 아래

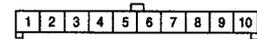
나. 커넥터 형상 및 단자 번호



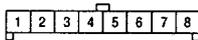
TCU "A"



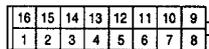
TCU "B"



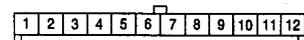
계기판 "A"



계기판 "B"



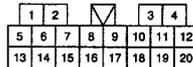
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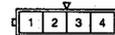
계기판 "D"



모드 스위치



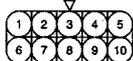
고장진단 커넥터



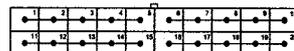
스로틀 포지션  
센서



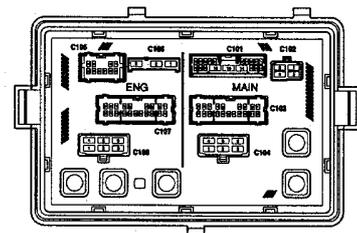
엔진 스피드 센서



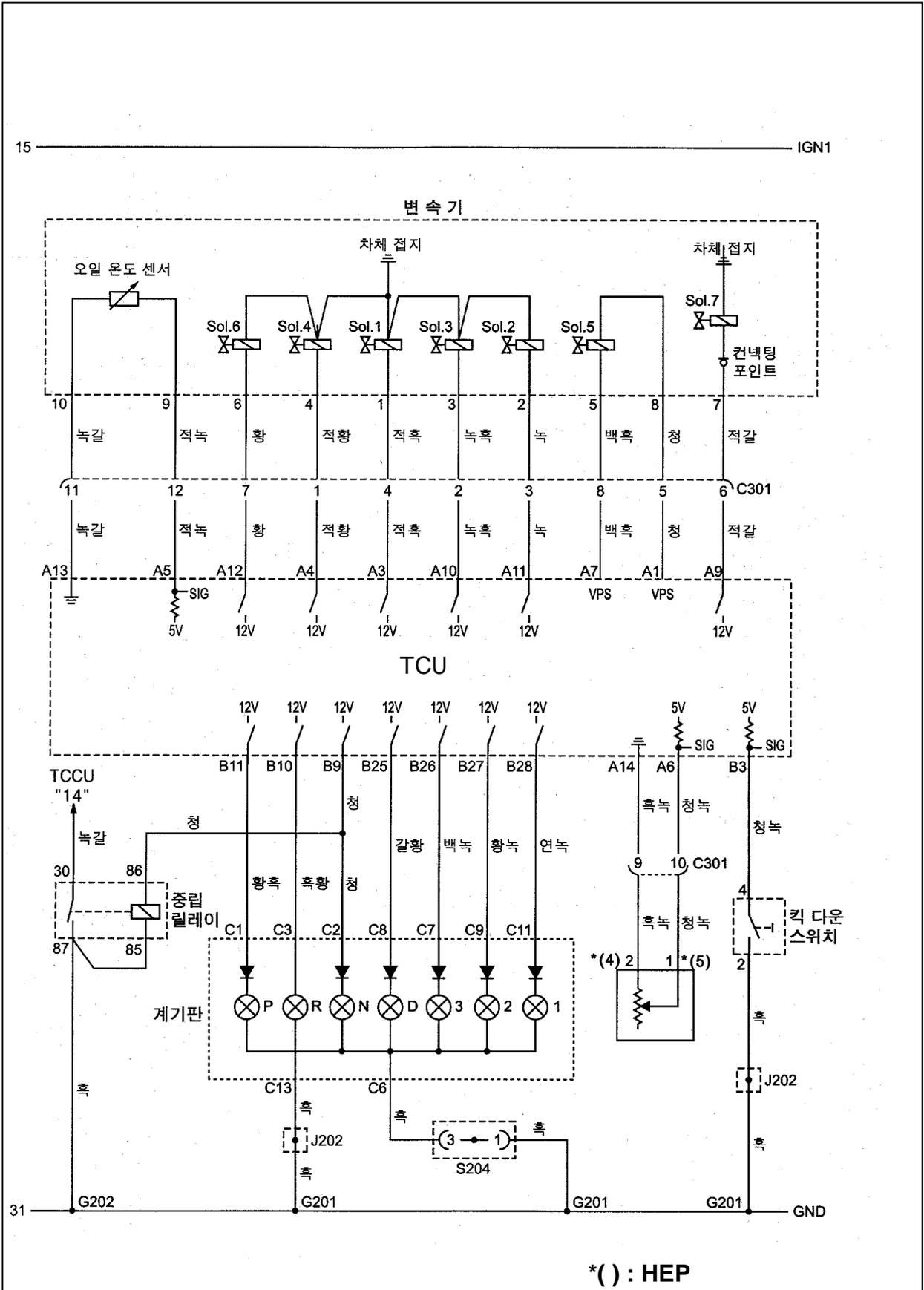
C302 (흑색)



S202 (흑색)



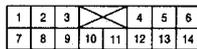
2.



가. 와이어링 하네스 커넥터 및 접지 안내

커넥터 (단자수, 색상)	연결배선 명칭	커넥터 및 접지 위치
C301 (16 핀, 흑색)	W/H 메인 - W/H 변속기	트랜스퍼케이스 위
S204 (14 핀, 무색)	W/H 메인	오디오 뒤
J202	W/H 메인	계기판 뒤
G201	W/H 메인	전방 좌측 레그룸 상단
G202	W/H 메인	전방 좌측 레그룸 상단

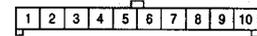
나. 커넥터 형상 및 단자 번호



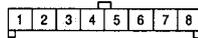
TCU "A"



TCU "B"



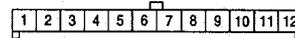
계기판 "A"



계기판 "B"



계기판 "C"



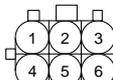
계기판 "D"



트랜스미션



(HPPC)



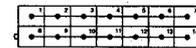
(HEP)



킥 다운 스위치



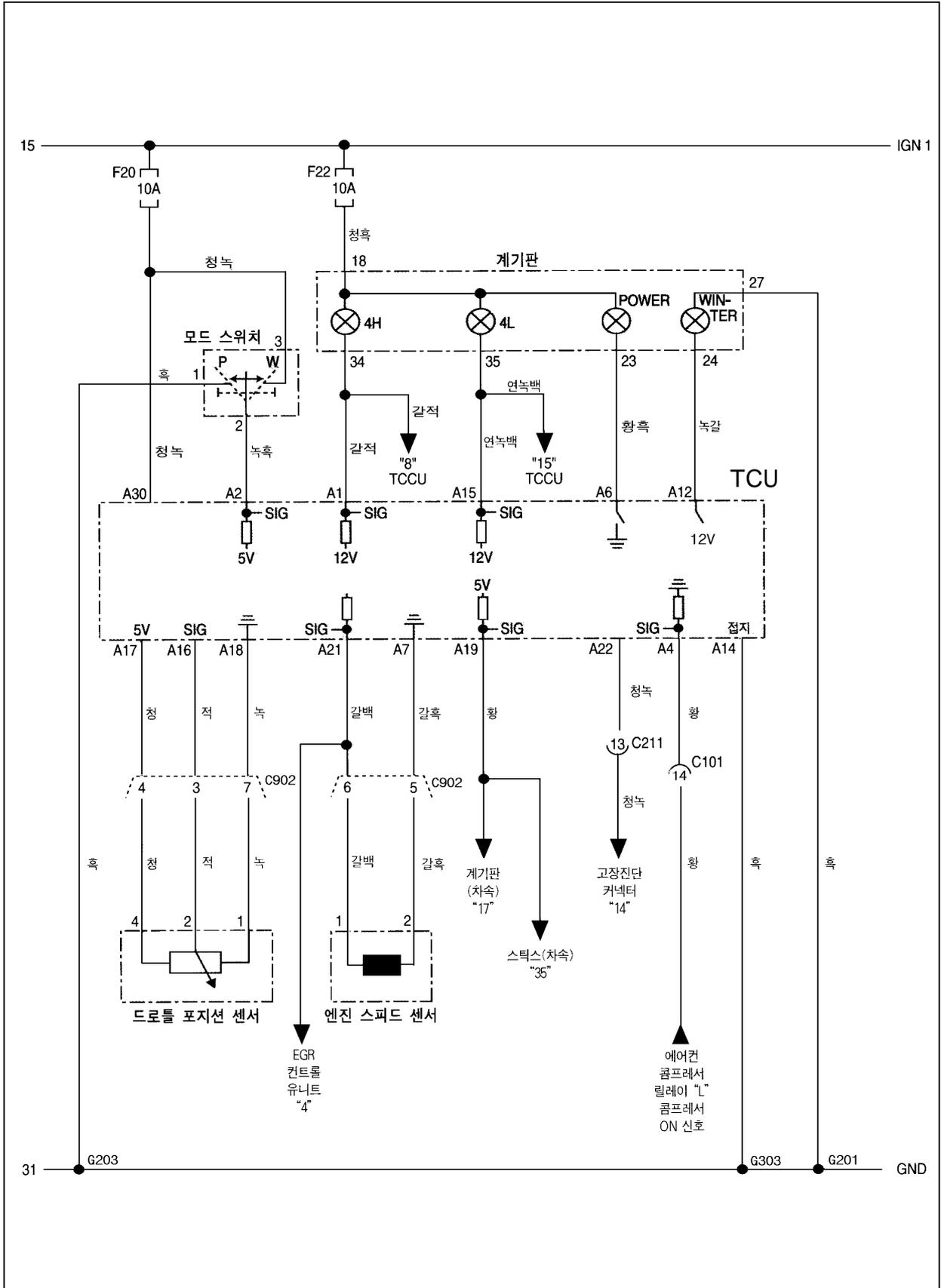
C301 (흑색)



S204 (무색)

## 2.

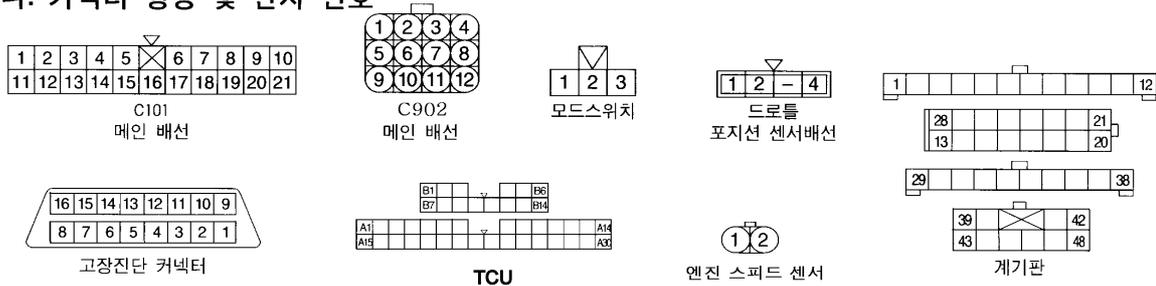
1. , , ,



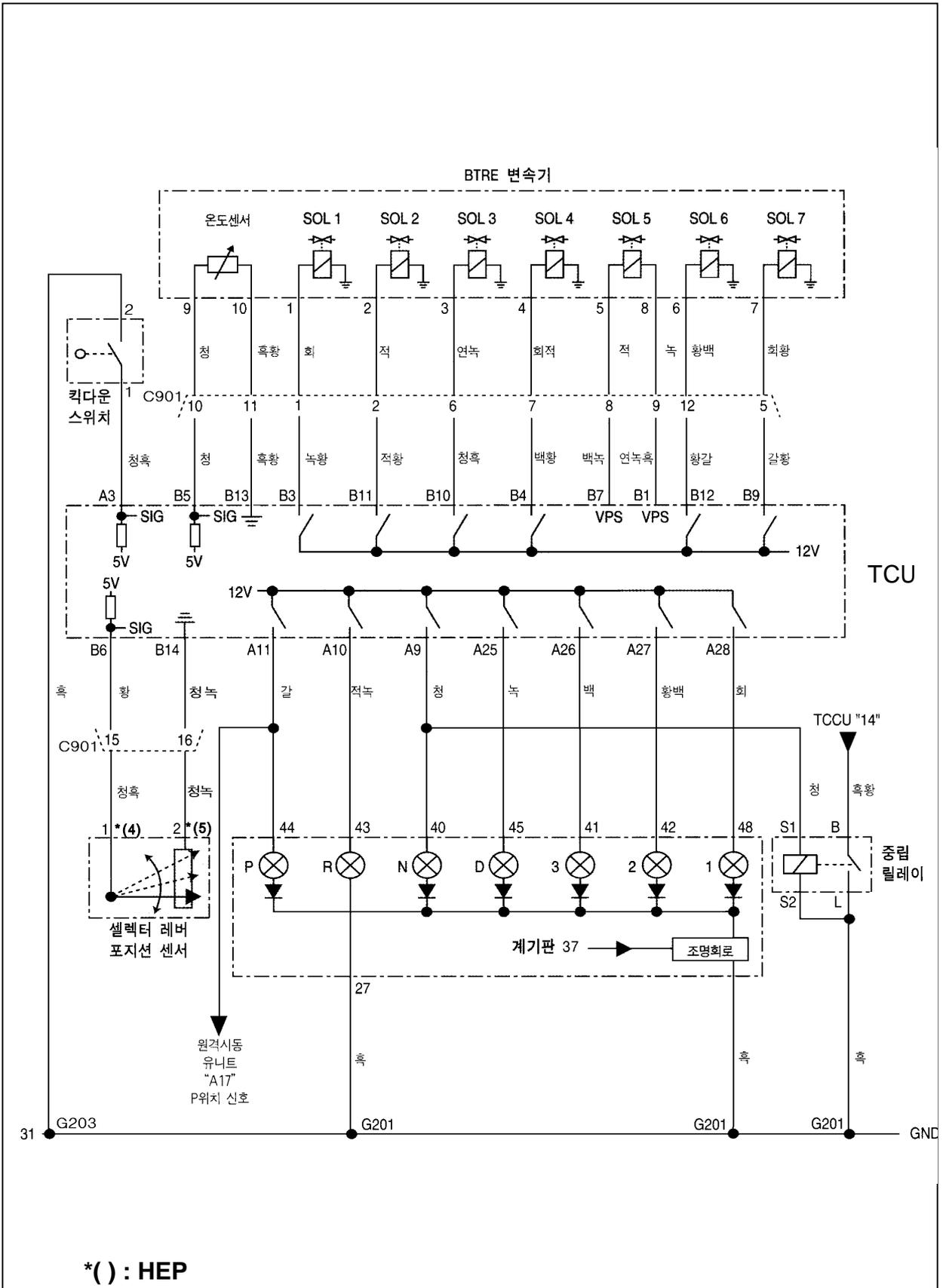
가. 와이어링 하네스 커넥터 및 접지 안내

번호	단자수	색상	연결배선 명칭	커넥터 및 접지 위치
C101	2	무색	엔진 - 메인	엔진룸 릴레이박스
C902	12	흑색	메인 - T/M	T/C 위쪽
G201	접지		메인	실내 릴레이 박스 좌측
G203	접지		메인	제털이 밑 (좌)
G303	접지		메인	TCU 옆 (조수석 의자 밑)

나. 커넥터 형상 및 단자 번호



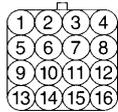
2.



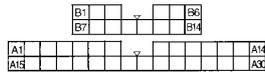
가. 와이어링 하네스 커넥터 및 접지 안내

번호	단자수	색상	연결배선 명칭	커넥터 및 접지 위치
C207	16	흑색	엔진 - 메인	T/C 위쪽
G201	접지		메인 - T/M	실내 릴레이 박스 좌측
G202	접지		메인	스틱스 옆(가속페달위)
G203	접지		메인	채털이 밑(좌)

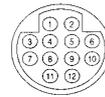
나. 커넥터 형상 및 단자 번호



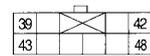
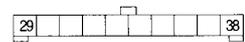
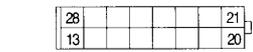
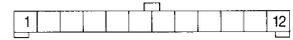
C901  
T/M 배선



TCU



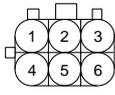
BTRE 변속기 커넥터



계기판



(HPPC)



(HEP)



킥다운 스위치



중립릴레이

**17. ( )**

1		B14 ←  B30	• IG "ON"		• 11 ~14 V
2		B14 ←  B2	• IG "OFF"		• 11 ~14 V
3	4WD"HIGH"	B14 ←  B1	• 4WD : 4H		4WD : • 2H,4L : 11 ~ 14 V • 4H : 1 V
4	4WD"LOW"	B14 ←  B15	• 4WD : 4L		4WD : • 2H,4H : 11~14 V • 4L : 1 V
5		B14 ←  B19	• "D"		• 2.5 ~ 3V
6	"POWER LAMP"	B14 ←  B6	• IG "ON"		• POWER : 1V • WINTER : 11 ~ 14V
7	"WINTER LAMP"	B14 ←  B12	• IG "ON"		• WINTER : 11 ~ 14V • POWER : 1V
8		B21 ←  B7	•		7V ( RPM )
9		B14 ←  B4	• ( )		• "ON" : 12V • "OFF" : 1V
10		B14 ←  B3	• IG "ON"		• : 4.7 ~ 5.2 V • WOT: 1V

11			<ul style="list-style-type: none"> <li>• IG "ON"</li> </ul>	<ul style="list-style-type: none"> <li>• P : 4.0 V</li> <li>• R : 3.5V</li> <li>• N : 3.0V</li> <li>• D : 2.5V</li> <li>• 3 : 2.0V</li> <li>• 2 : 1.5V</li> <li>• 1 : 1.0V</li> </ul>
12			<ul style="list-style-type: none"> <li>• IG "ON"</li> </ul>	<ul style="list-style-type: none"> <li>• 11 ~ 14V</li> </ul>
13	•		<ul style="list-style-type: none"> <li>• IG "ON"</li> </ul>	<ul style="list-style-type: none"> <li>•0 :</li> <li>•50 : 2.1V</li> <li>•120 :</li> <li>•135 :</li> </ul>
	•		<ul style="list-style-type: none"> <li>• IG "OFF"</li> </ul>	<ul style="list-style-type: none"> <li>•0 : 5~6kΩ</li> <li>•50 : 0.7~0.8kΩ</li> <li>•90 : 0.2~0.3kΩ</li> <li>•135 : 0.1~0.2kΩ</li> </ul>
14			<ul style="list-style-type: none"> <li>• IG "OFF"</li> </ul>	<ul style="list-style-type: none"> <li>• 22~30Ω</li> </ul>
			<ul style="list-style-type: none"> <li>• IG "OFF"</li> </ul>	<ul style="list-style-type: none"> <li>• 3.6~5.5Ω</li> </ul>
15	TPS		<ul style="list-style-type: none"> <li>• IG "ON"</li> </ul>	<ul style="list-style-type: none"> <li>• 11 ~ 14V</li> </ul>
	•		<ul style="list-style-type: none"> <li>• IG "ON"</li> </ul>	<ul style="list-style-type: none"> <li>• 0.4 ~ 1.0V</li> </ul>
	•		<ul style="list-style-type: none"> <li>• WOT</li> </ul>	<ul style="list-style-type: none"> <li>• 3.0 ~ 4.5V</li> </ul>

[memo]