

# WinAlign

6.0



**HUNTER**  
Engineering Company

.....	<b>1</b>
.....	1
.....	1
.....	1
.....	1
.....	2
.....	3
.....	3
HFSS      가	.....4
/	.....5
.....	5
.....	5
.....	5
.....	6
.....	6
가	.....7
.....	7
“      ”	.....7
.....	9
AlignGuide	.....9
.....	10
.....	10
ExpressAlign    DSP400	..... 11
DSP400      ExpressAlign	..... 19
가	..... <b>27</b>
.....	27
.....	27
.....	28
.....	28
.....	28
.....	28
.....	29
.....	29
.....	29
.....	29
.....	29
.....	29
DSP400	..... 30
.....	30
.....	30
.....	30
.....	31
.....	32
.....	33
.....	34
(VIN)	..... 34
“      ”	..... 35
.....	35

.....	35
.....	37
.....	38
.....	38
.....	38
.....	38
“ ” .....	39
.....	41
.....	42
.....	43
가 .....	43
.....	45
.....	46
.....	47
, S.A.I. ....	48
.....	49
S.A.I. ....	52
S.A.I./I.A. (FasterCaster) .....	53
.....	55
.....	60
.....	60
.....	61
ExpressAlign™ .....	61
.....	<b>66</b>
.....	66
.....	67
가 .....	<b>70</b>
Virtual View .....	70
3- .....	70
Virtual View .....	71
.....	72
VideoTech .....	74
VideoTech .....	74
VideoTech .....	74
VideoTech .....	75
.....	<b>76</b>
WinAlign - / .....	76
.....	76
.....	77
.....	78
.....	80



K4

“nnnnnn”

K4

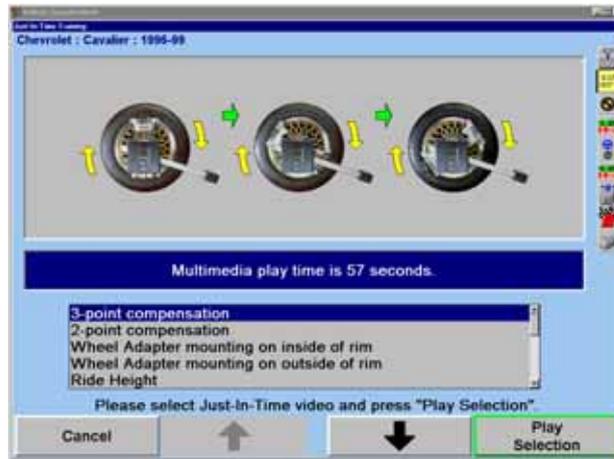


WinAlign 6.0

가

“ ”

“ ”



“↑”

“↓”

가



가

가

가

가

---

:

:

:

:

OSHA 가

Hunter

가

가

가



: 가

/

PC : 120VAC ( ) 50/60 Hz

PC : 230VAC ( ) 50/60 Hz  
Hunter

: 가

:

:

가

Hunter

:

:

120/230 ( )

:

6/3

:

720

:

+32°F +122°F (0°C +50°C)

;

95%

:

6000 ft (1829 m)



ON ( )



OFF ( )



가

“ ”  
1.5

가 가

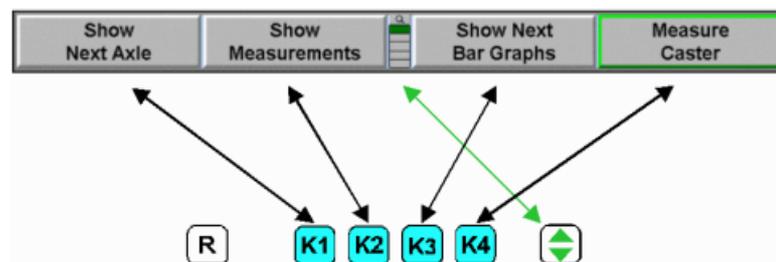


“ ”

가

	K1		
	K2		
	K3		
	K4		( )
			( )

, , ,



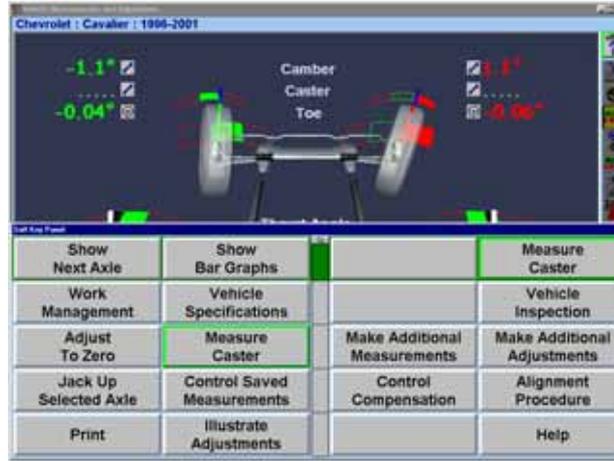
“K2” “K3”

가

“ ” ,  
 “ ” 가 “Shift”  
 ,

가

가



“ ” “ ”

“ ” 66

“nnnnnn”



가 ( K4) 가

**Measure Caster**

ExpressAlign

“ ”  
WinAlign

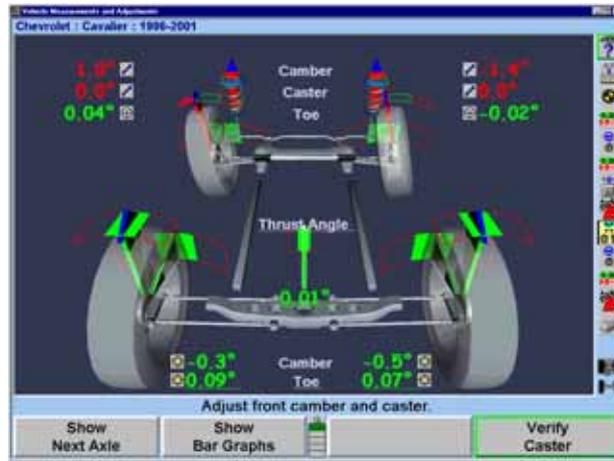
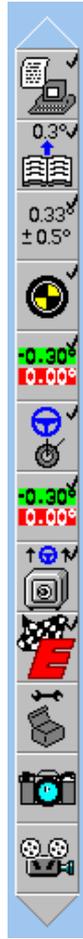
가  
가

가  
“ ”가

가

“ExpressAlign”

“ ”  
가



### AlignGuide

AlignGuide WinAlign , 가 , 가 ,  
WinAlign

AlignGuide

AlignGuide

가 WinAlign

WinAlign



(

)



R

“ ”

“ ”

“ ”

가

“ ”

가

:

( 가 ).

“ ”

가

“ ”

“ ”

가

: 가

ExpressAlign DSP400

가 :

가
ExpressAlign Level III

: ExpressAlign  
WinAlign “ ”

“ ” “DSP400”  
66

:

가

가

가

“ ” “ ”  
“ ”



“↑” “↓”

“OK”



“↑” “↓”

“OK”

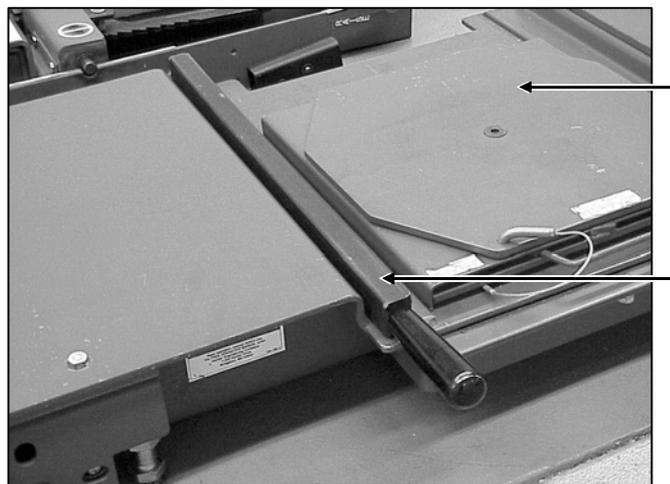
“ ”

가

“DSP400

가

” 30



15

27

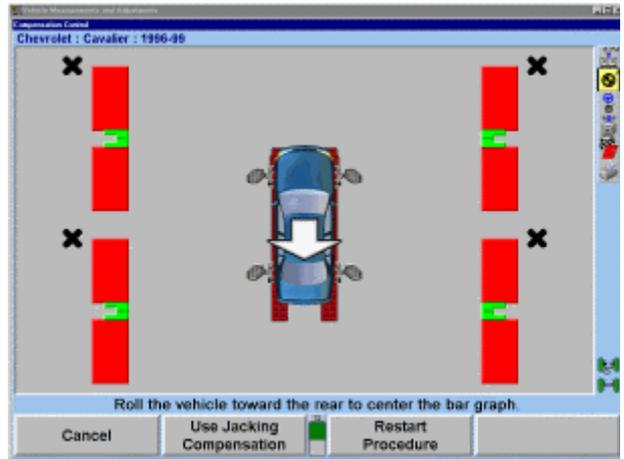
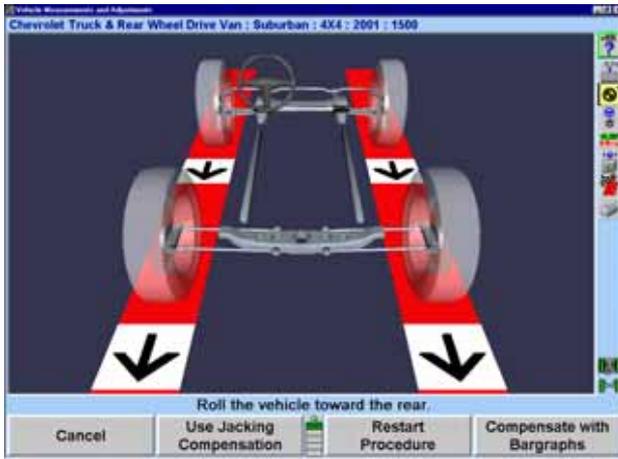
“ ”

: ( , )

:

가

: ( )



: 28 가 가 12 - 14 가

가

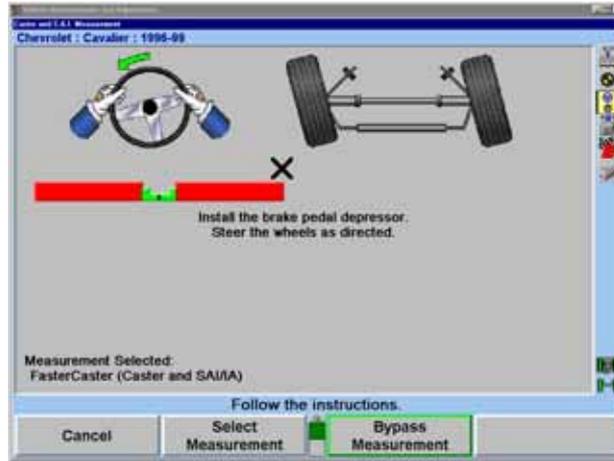
가

가

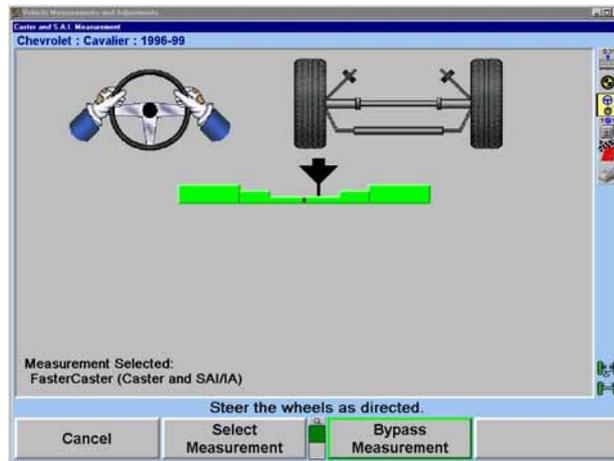
가

:

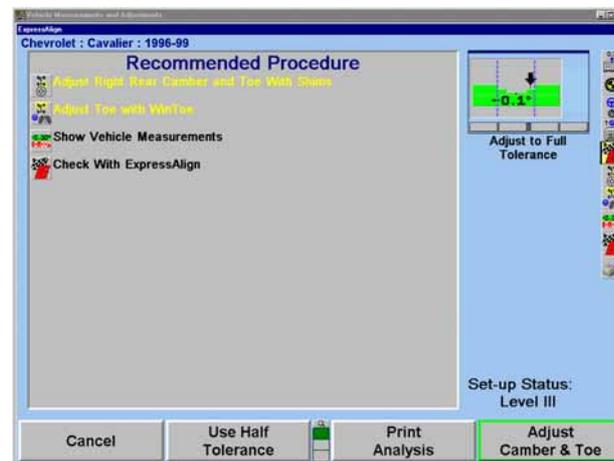
“ S.A.I. ”



“ ” 가 가



“ExpressAlign”



: 가

“ExpressAlign”

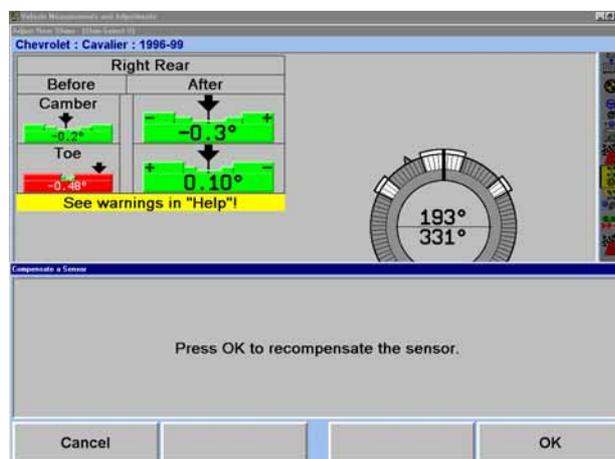
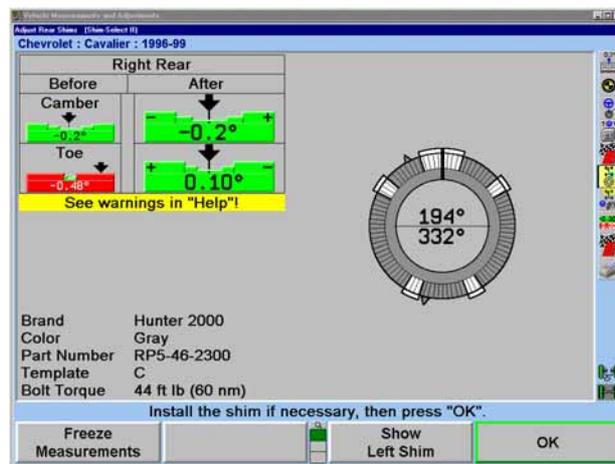
가

“ExpressAlign”

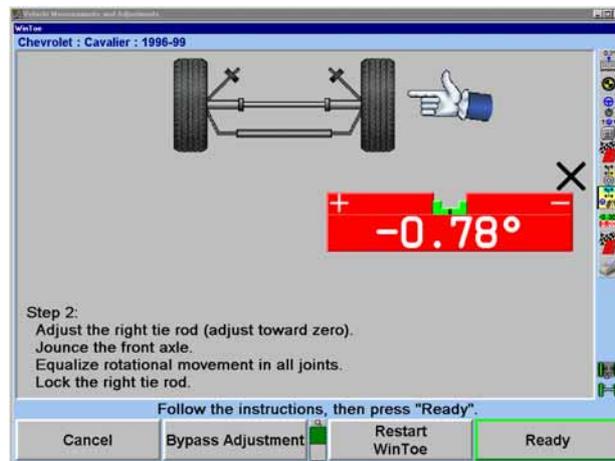
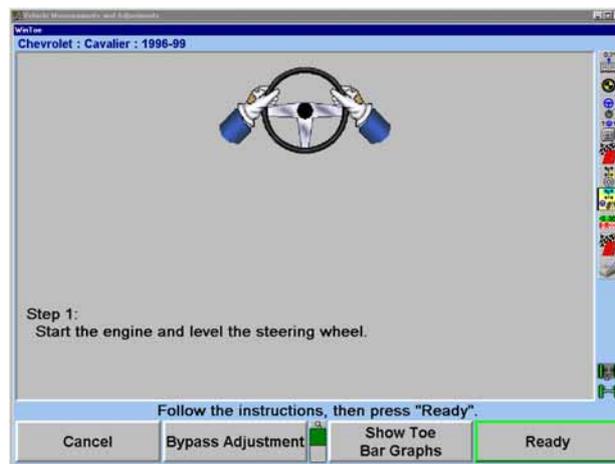
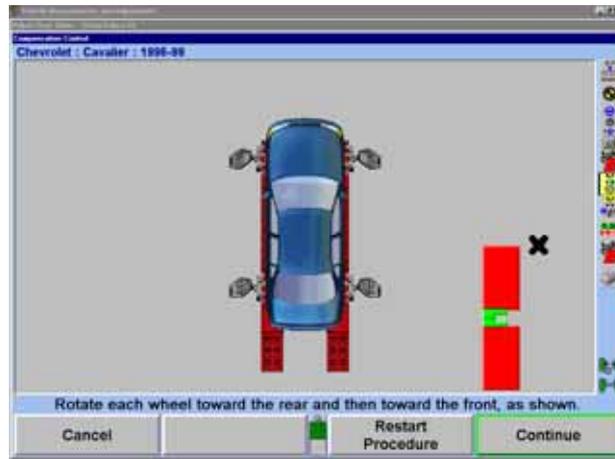
ExpressAlign 가 가 가

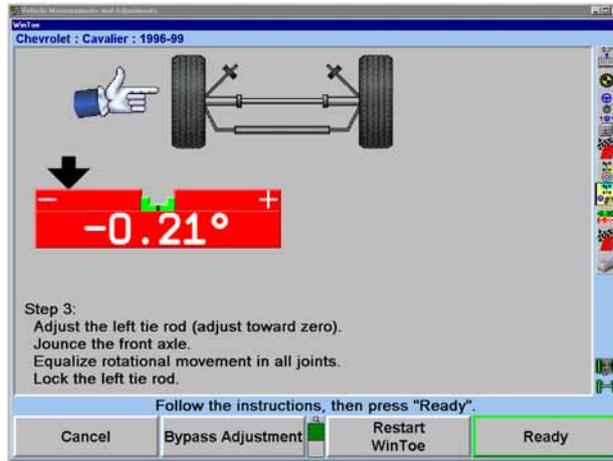
“ ShimSelect II®

: / ABS 가



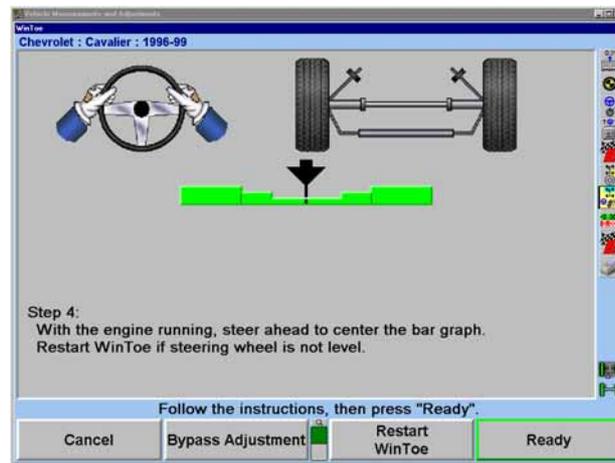
“OK”



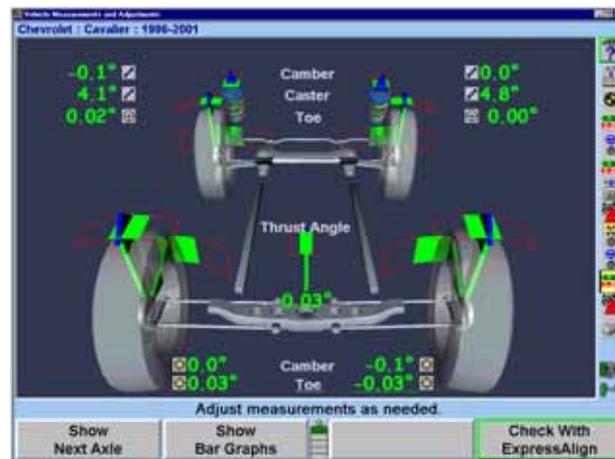


가

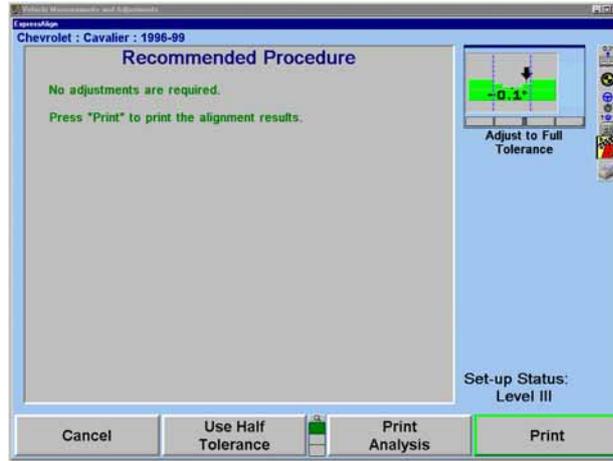
WinToe



“ExpressAlign



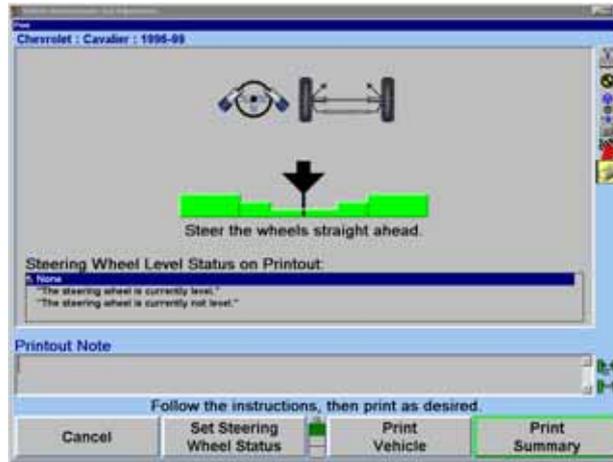
“ ”



“ ”

가

가 “ ”



“ ”



“ 4- ” 가 /

가
ExpressAlign Level III

: ExpressAlign  
*WinAlign* “ ”

가

가

가

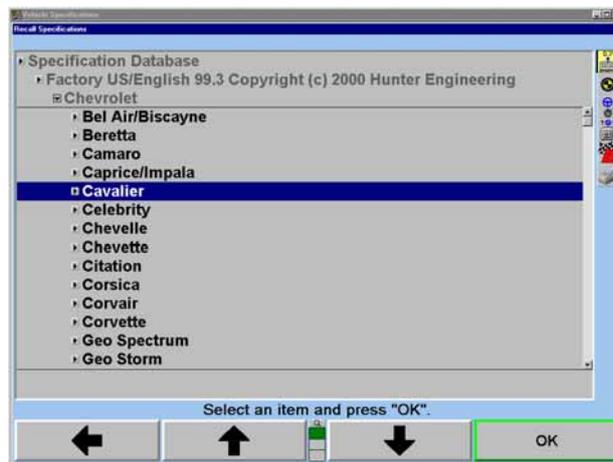
:

“ ” “ ”  
“ ”



“↑” “↓”

“OK”



“↑” “↓”

“OK”

“ ”

“ ”

Vehicle Specifications  
Chevrolet : Cavalier : 1996-99

Front	Spec.	Tol.
Left Camber	-0.20°	1.00°
Right Camber	-0.20°	1.00°
Cross Camber		0.70°
Left Caster	4.30°	1.00°
Right Caster	4.30°	1.00°
Cross Caster		0.70°
Total Toe	0.10°	0.25°
Left SAI		
Right SAI		
Rear		
Camber	-0.25°	0.75°
Total Toe	0.20°	0.30°
Thrust Angle		0.25°

View or edit the specifications.

Recall Specifications    Show Secondary Specifications    Mount Sensors

»

Vehicle Measurements and Adjustments  
Compensation Control  
Chevrolet : Cavalier : 1996-2001

Remove the pins from the turn plates and slip plates.  
Lower and jounce the vehicle after all sensors are compensated.

Compensation Procedure Selected:  
3-Point (Pro-Comp)

Mount the sensors, as shown, then compensate.

Continue

»

27

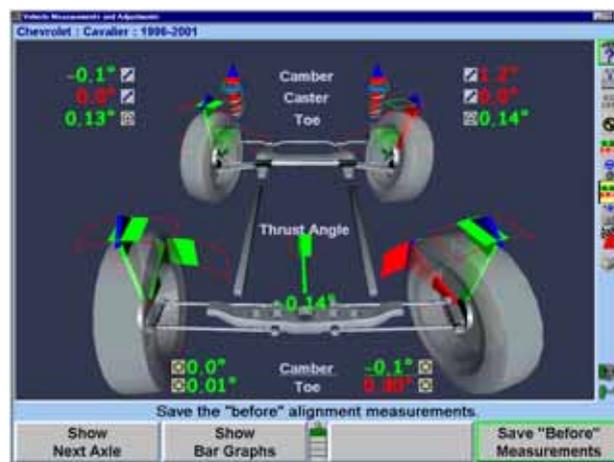
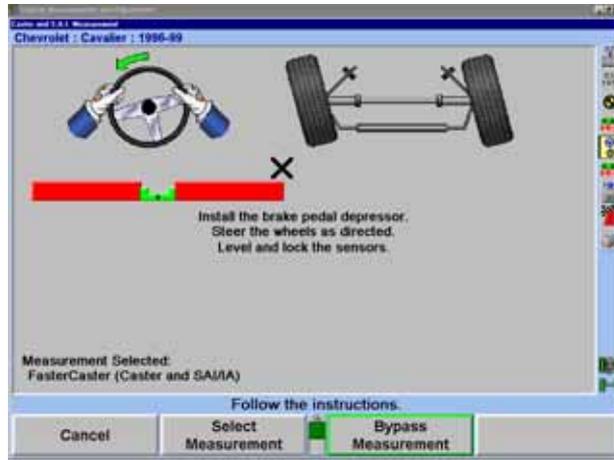
Vehicle Measurements and Adjustments  
Chevrolet : Cavalier : 1996-2001

Measure caster.

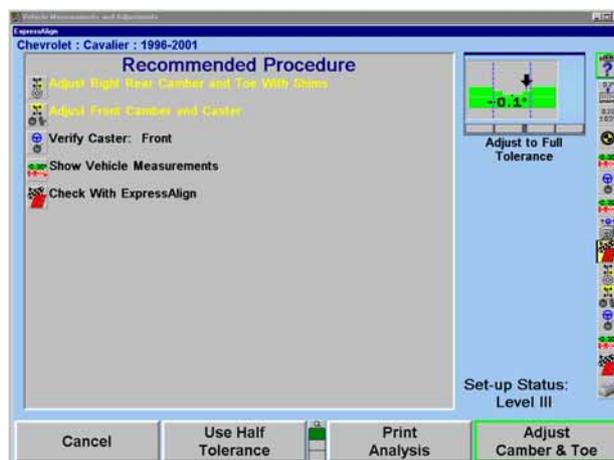
Show Next Axle    Show Bar Graphs    Measure Caster

»

S.A.I.



“ExpressAlign”



: 가

“ExpressAlign”

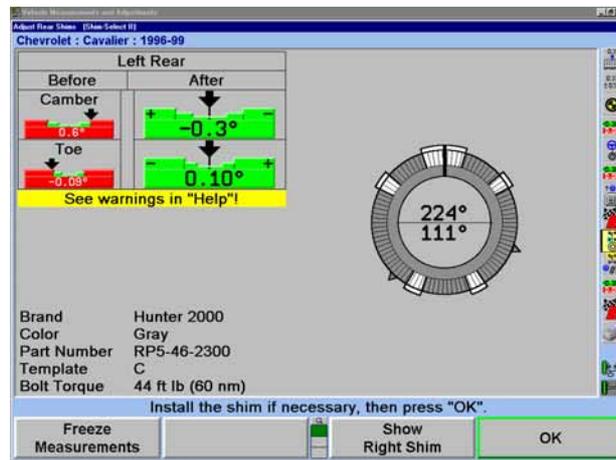
가

“ExpressAlign”

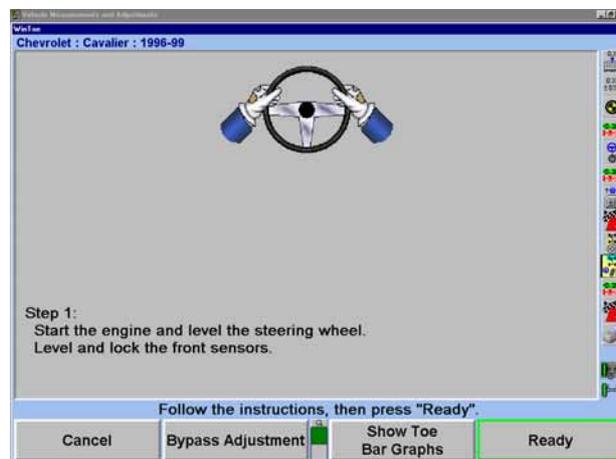
“ ”

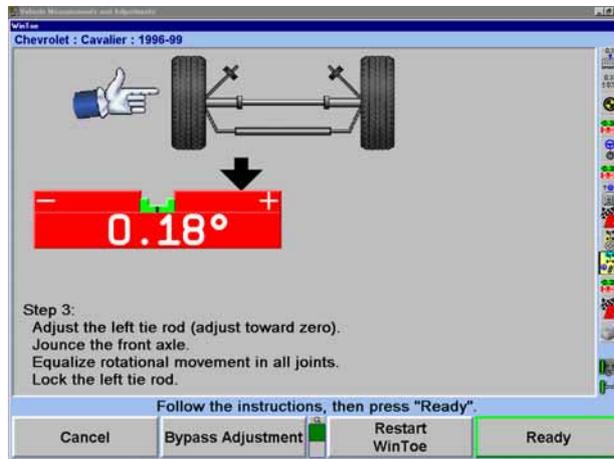
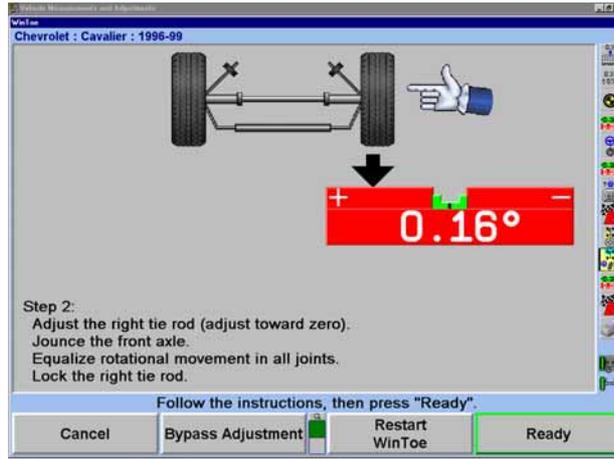
ShimSelect II®

: / ABS 가



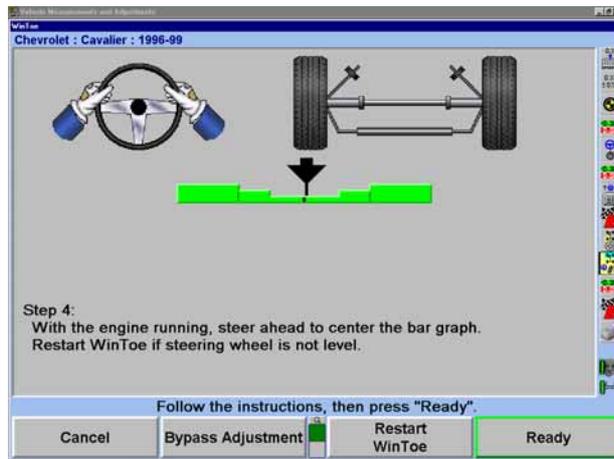
ExpressAlign  
“OK”

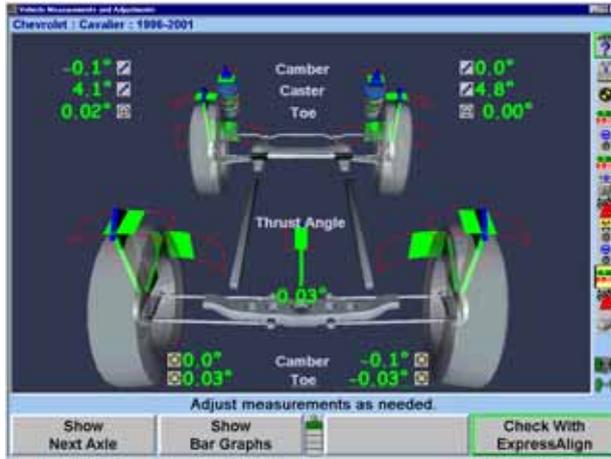




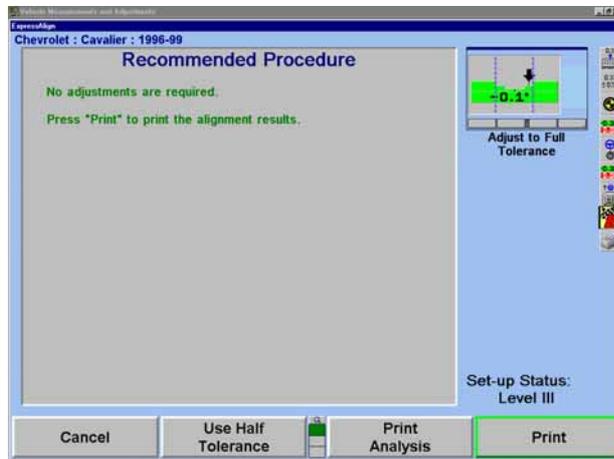
가

WinToe

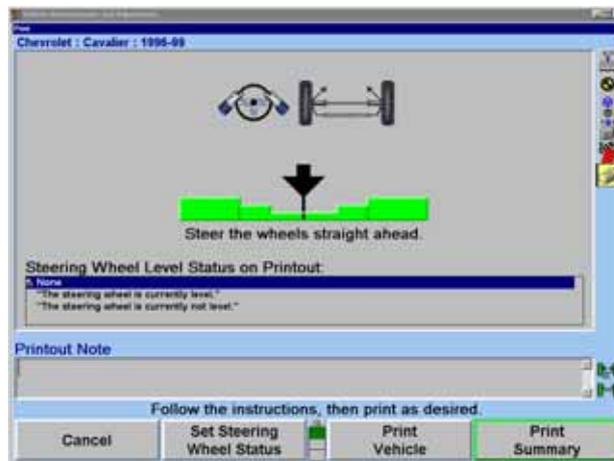


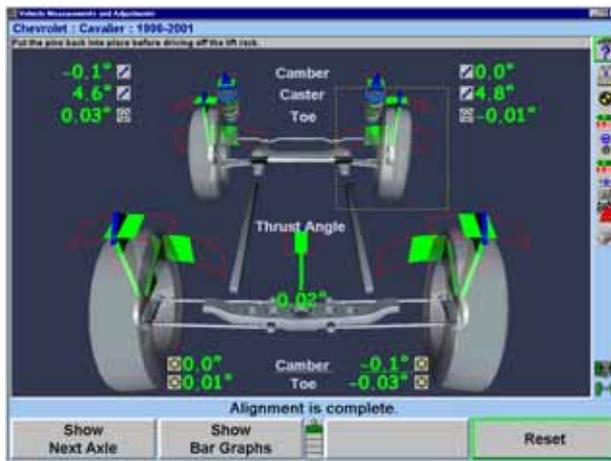


“ExpressAlign ”



가 “ ” 가  
가 “ ”





# 가



' ( ).

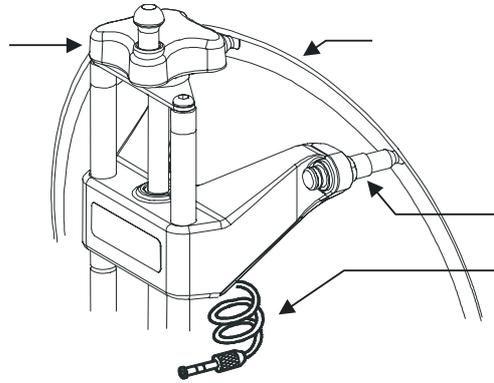
: 가 ( )

( )

:  
.  
.  
가 가

. 가 . 가

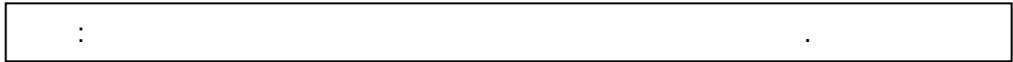
가



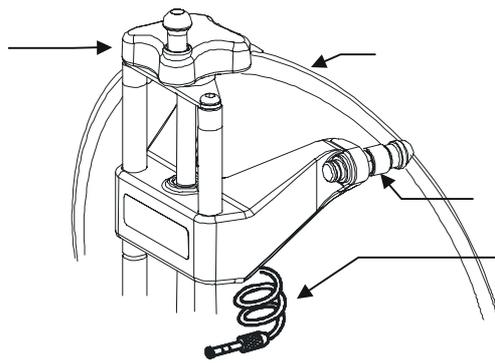
가

가

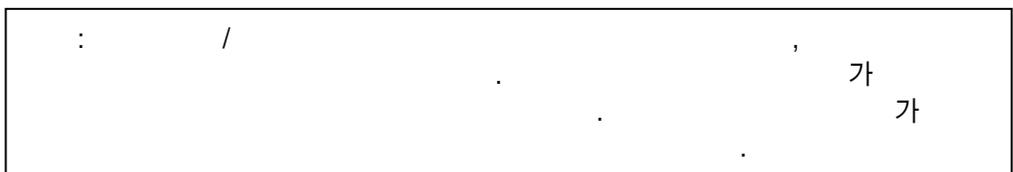
가



가



가



가

가

2-

가

가

LED가

:

2-

3-

/

3-

(Pro-Comp)

가

4

(

).

2-

, CRT

DSP400

가

가

“ ”

	Spec.	Tol.
<b>Front</b>		
Left Camber	-0.20°	1.00°
Right Camber	-0.20°	1.00°
Cross Camber		0.70°
Left Caster	4.30°	1.00°
Right Caster	4.30°	1.00°
Cross Caster		0.70°
Total Toe	0.10°	0.20°
Left SAI	°	°
Right SAI	°	°
<b>Rear</b>		
Left Camber	-0.25°	0.75°
Right Camber	-0.25°	0.75°
Total Toe	0.20°	0.30°
Thrust Angle		0.25°

View or edit the specifications.

Recall Specifications   Show Secondary Specifications   Vehicle Inspection

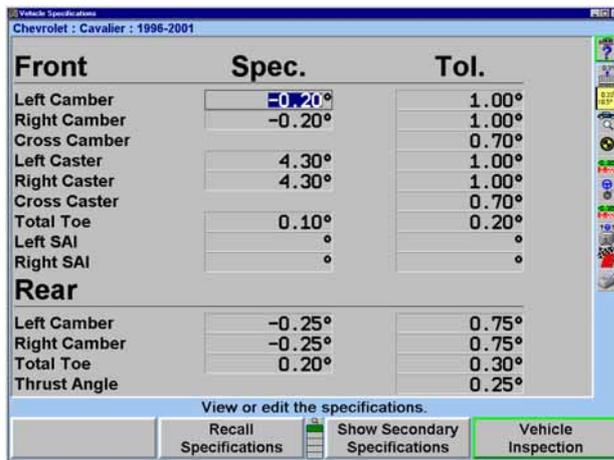
“ ”

“ ”

“ ”

“ ”

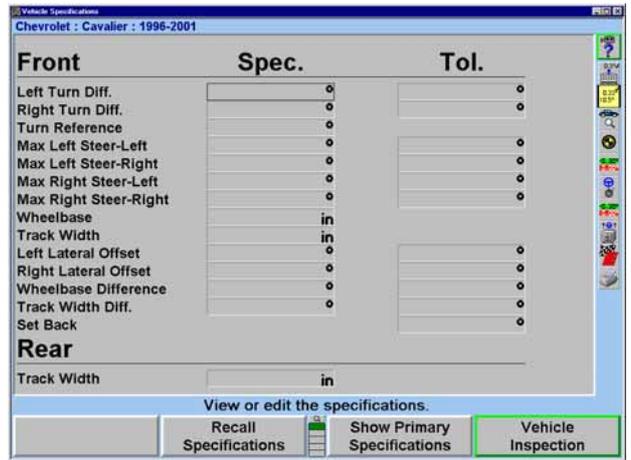
“ ” S.A.I., - -



“ ”

”

“ ”



“ ”

”

가

“

”



“

”

“

”

“

”

“

”

“

”

가

“

”

가

/

“

”

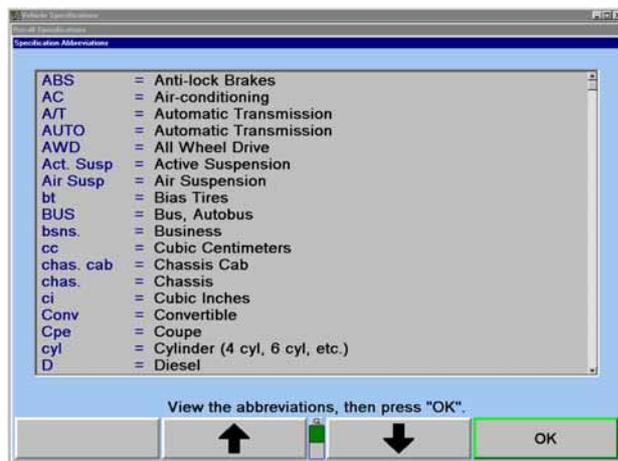
35

“

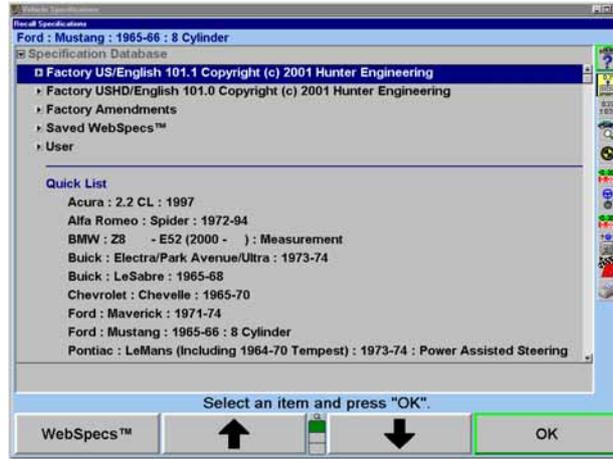
”

“

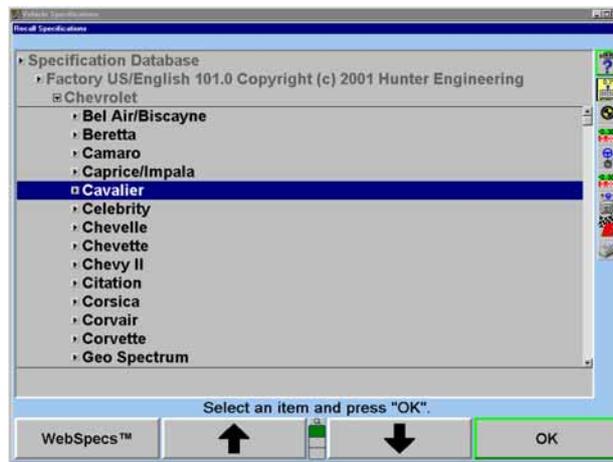
”



가



“↑” “↓”  
“OK”



“↑” “↓”

“OK”

“ ”

“Chrysler”

“C”	;	“Cadillac”	.
“H”	;	“Chevrolet”	.
“R”	;	“Chrysler”	.

가

가 :

' ,  
' ,  
' ,

(VIN)

(VIN)

가

가

:	VIN	1981
---	-----	------

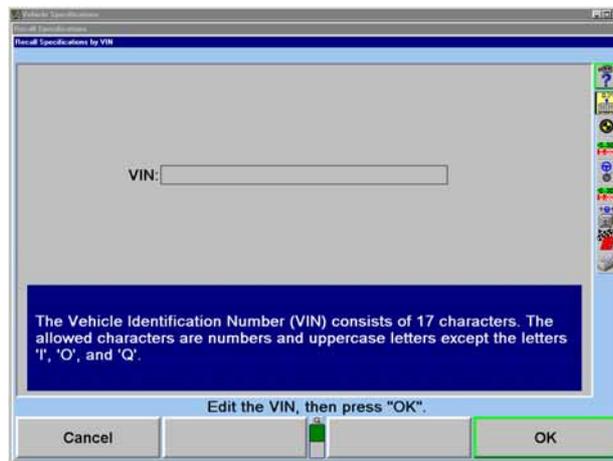
VIN

“VIN

...”

“VIN

”



VIN

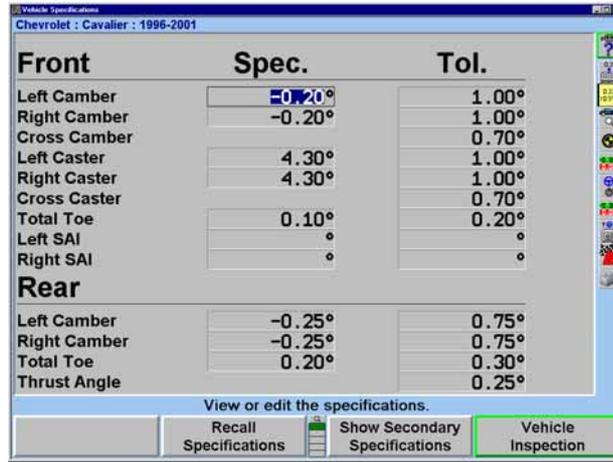
“Enter”

“OK”

VIN ( )

“OK”

가 VIN 가  
 “Enter” “OK” VIN .  
 VIN 가 VIN  
 가  
 “ ” 가  
 VIN ” 가 “ 가  
 ” 가  
 “ ”  
 가 “ 가 ”  
 가  
 “ ” “ ”  
 :  
 “↑” “↓” ”  
 “OK” 가  
 “↑” “↓” “ ” “OK” 가  
 “↑” “↓” “ ” “OK”  
 가  
 “ ” “ ”  
 “Enter” “Enter”



“0”

(1), (1 1/2), (1/2), (0.5), (1.01°)  
 (1” 30’)

: ( , , ) “ ”  
 “ ” 40

“ ”

, 2 1/2  
 [2] [Spacebar] [1] [/] [2] “ ”

“ ”

, 20 15’  
 [2] [Spacebar] [1] [5] “ ”

10 “0”

, 6’  
 [0] [Spacebar] [6] “ ”

: (-)

“ ” “Enter”

: “ ” “Enter”

“ ”

0.50° ± 0.25°

가 ±

0.50° + 0.25° - 0.30°

가

+ -

“ ”

“ + ” “ - ”

Front	Spec.	-Tol.	+Tol.
Left Camber	-0.50°	1.00°	1.00°
Right Camber	-0.50°	1.00°	1.00°
Cross Camber			0
Left Caster	1.17°	1.00°	1.00°
Right Caster	1.17°	1.00°	1.00°
Cross Caster			0
Total Toe	0.00°	0.16°	0.16°
Left SAI	0	0	0

Asymmetric specifications cannot be combined.

OK

“Enter” “Ok”

“ ”

:

$\pm 0.25^{\circ}$  (1/4 $^{\circ}$ )

$\pm 0.50^{\circ}$  (1/2 $^{\circ}$ )

$\pm 0.06''$  (

1/16",

0.13 $^{\circ}$  1.5mm)

“ ”

: 가 가

“ ”

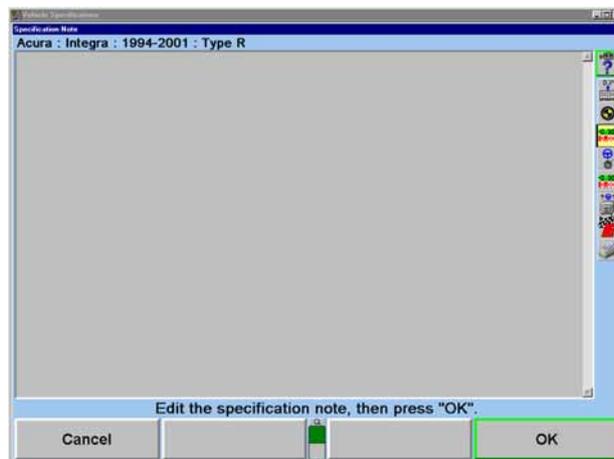
“ ”

“ ”

“OK”

“ ”

“ ”



/ . “OK”

( 가 ) “ ”

→ 96 Taurus

“ ”

가 :

:

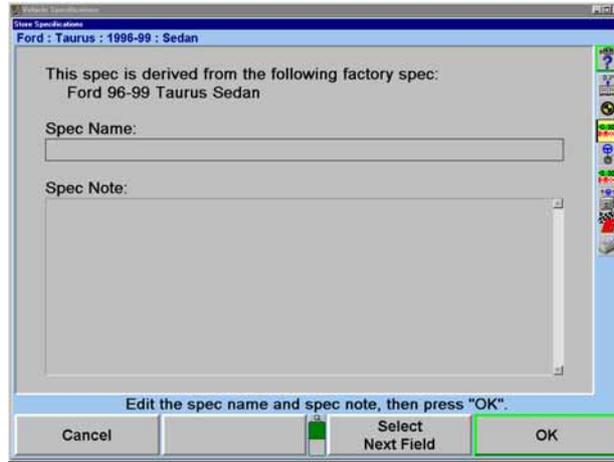
“ ”

“ ” “ ”

:

“ ” “ ”

가 , “ ” “ ”

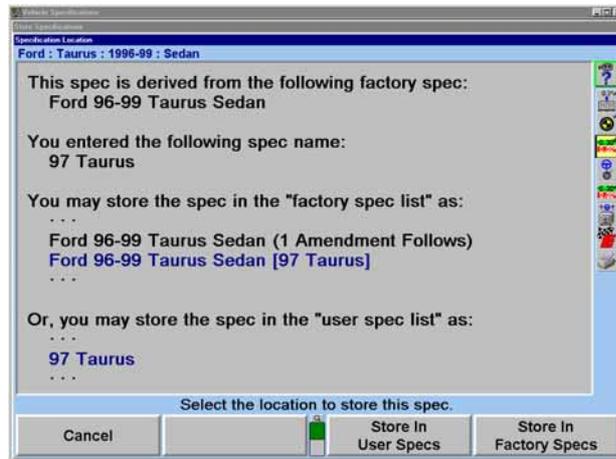


“ ” “ ”

“ ” “Tab” 가 “ ”

“OK”

“ ”

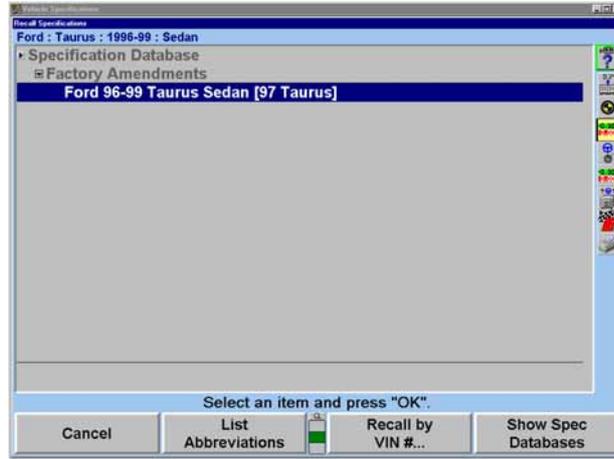


“ ” “ ”

“ ” 가 “ ” ?”

“OK” “ ”

“ ”



가

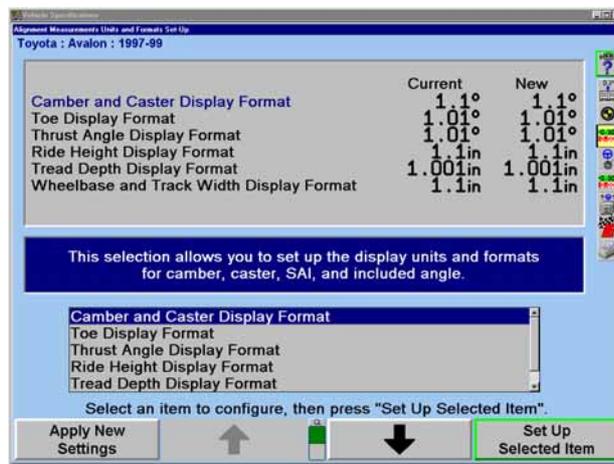
가

가 . 가

“ ” “ ” “ ”

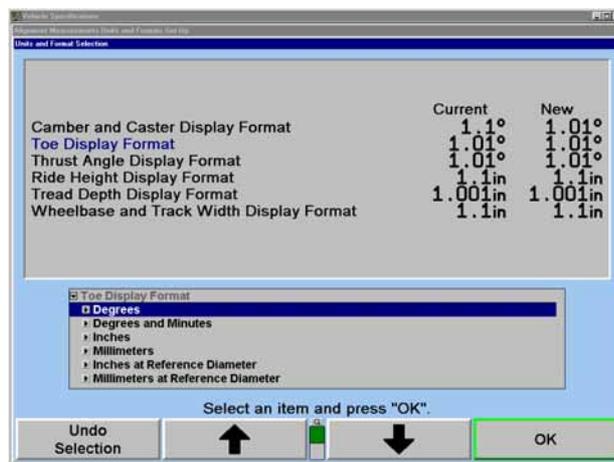
“ ” “ ”  
66 “ ”

가 . 가



“↑” “↓”

“ ” “ ”



“↑” “↓”

“OK”

“↑” “↓”

“OK”

“ ”

“↑” “↓”

“ ”

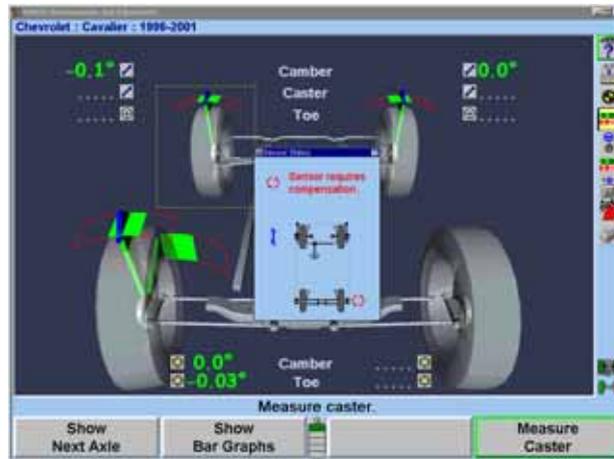
“ ”

“ ”

가 “ 가 ”

가

“ ”



가

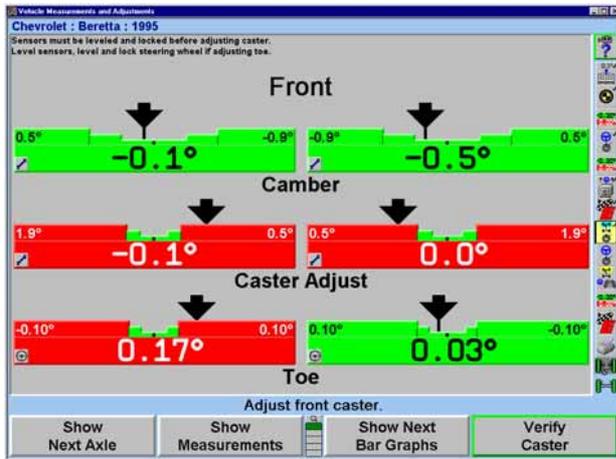
:

:	가
---	---

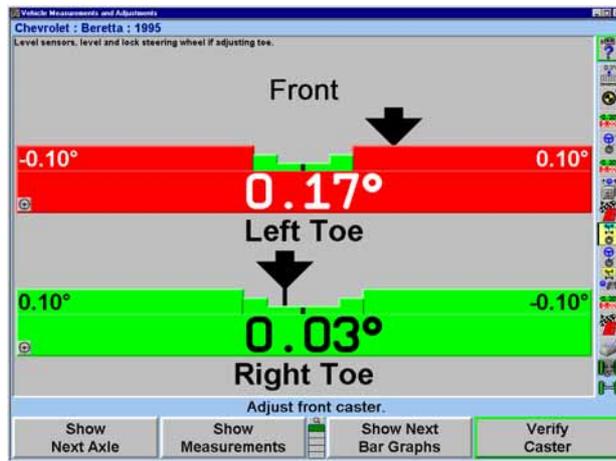
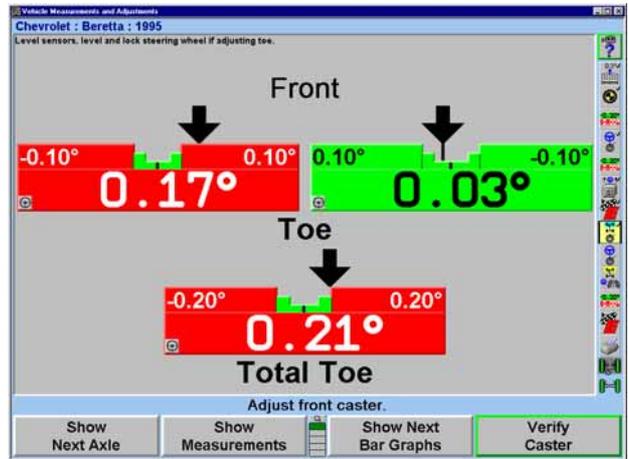
,  
가 :  
가 가  
가 ExpressAlign  
:  
( , )  
가 가 .  
가 가  
“ ” .



가



가

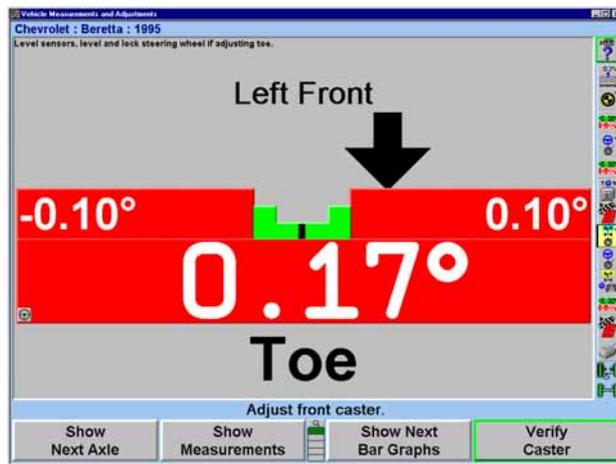


“ ”

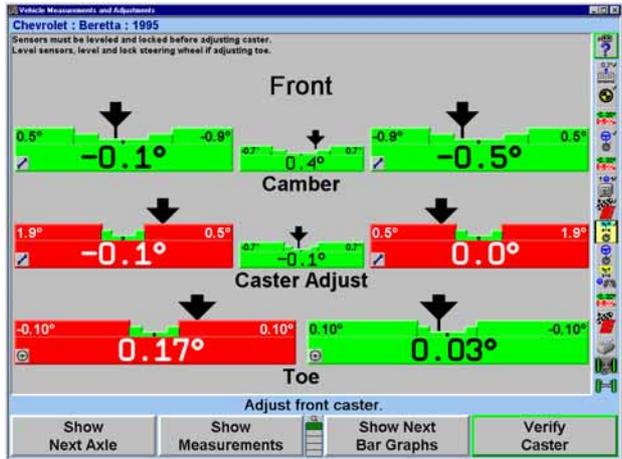
“ ”

가

“ ”



가

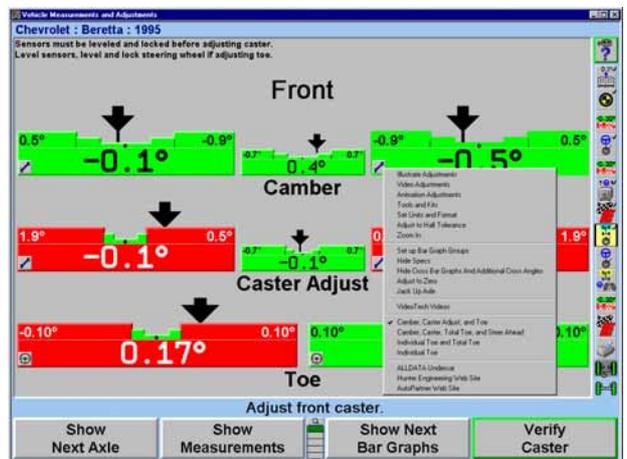
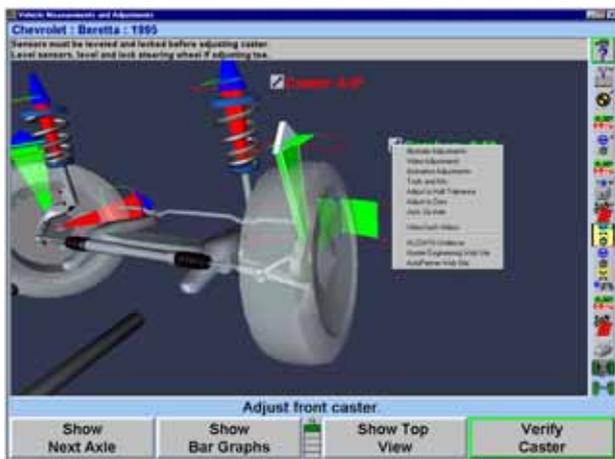


가

가  
"Tab"

WinToe  
SAI/IA

가



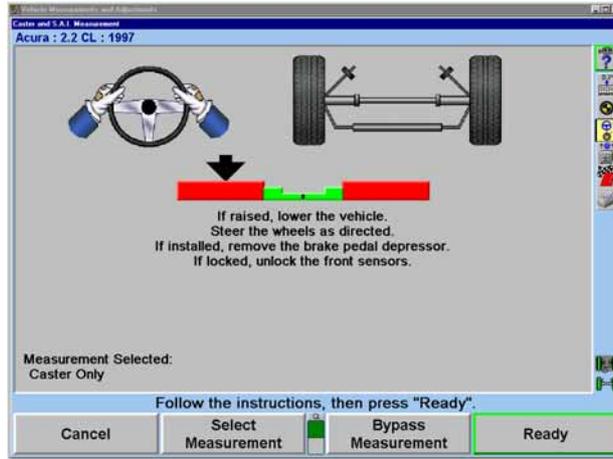
, S.A.I.

“ ”

(S.A.I.)  
S.A.I., I.A.

(I.A.)

“ ”가



(“X” )

( )

“X” 가

“X”



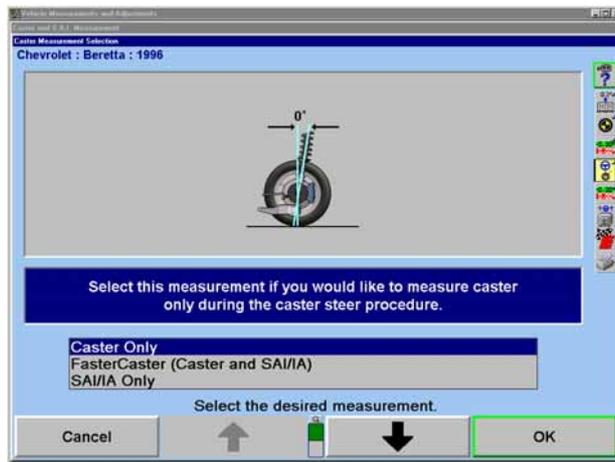
가

: , S.A.I. S.A.I./I.A. 가

: WinAlign S.A.I. 가 /

: DSP400 : ( )  
DSP400  
DSP400  
“ ”  
WinAlign

“ ” “ ” “ S.A.I.  
”  
“ ” :  
“ ” “ ”

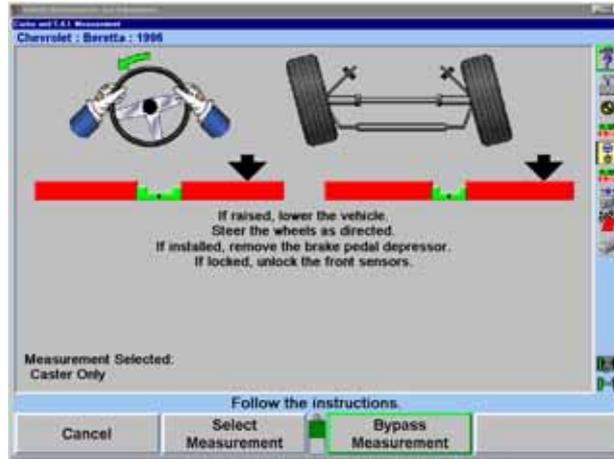


“↑” “↓” “ ”  
“OK” “ S.A.I. ”

: 가

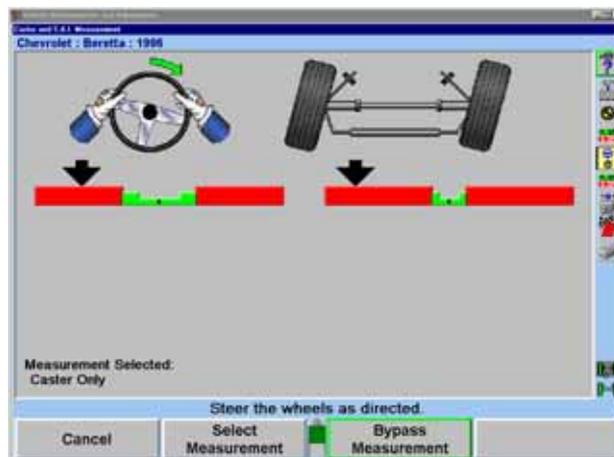
가  
가

“ ”



가

가





“ ” “ ” “ ” “ ”

가  
가  
가

ExpressAlign  
가  
ExpressAlign,

ExpressAlign  
가

S.A.I.

“ ” “ ” “ ” S.A.I.

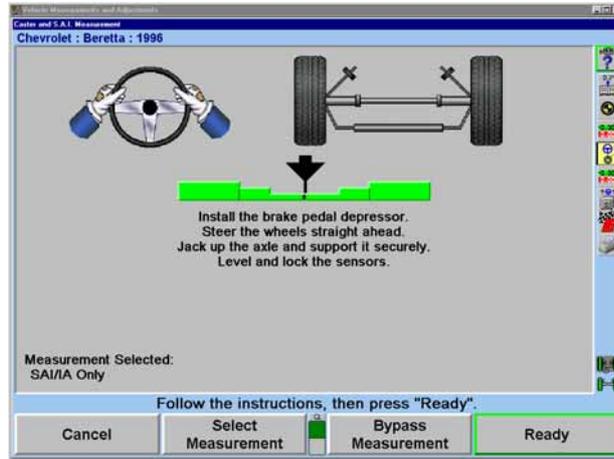
“S.A.I./I.A.” 가 :

“S.A.I./I.A.” “↑” “↓”



“OK” “ S.A.I.”

가



“ ”

“ ” 49 . S.A.I. S.A.I. I.A.

: S.A.I.

*S.A.I./I.A. (FasterCaster)*

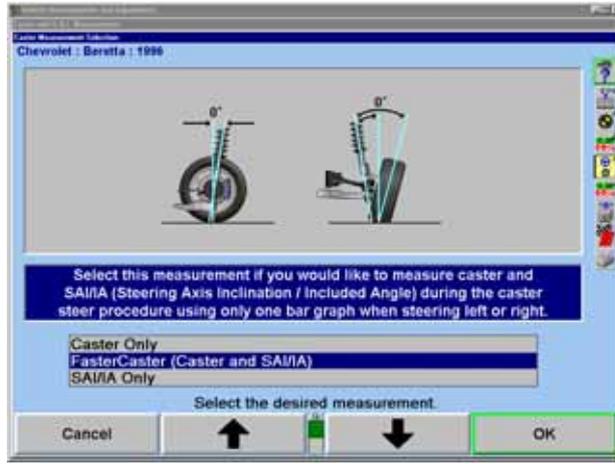
FasterCaster

“ ” “ ” “ S.A.I.

“FasterCaster ( S.A.I./I.A.)”가 :

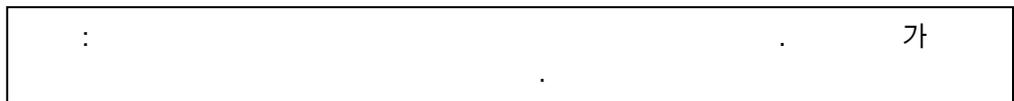
“ ” “ ”

“FasterCaster ( S.A.I./I.A.)” “↑” “↓”

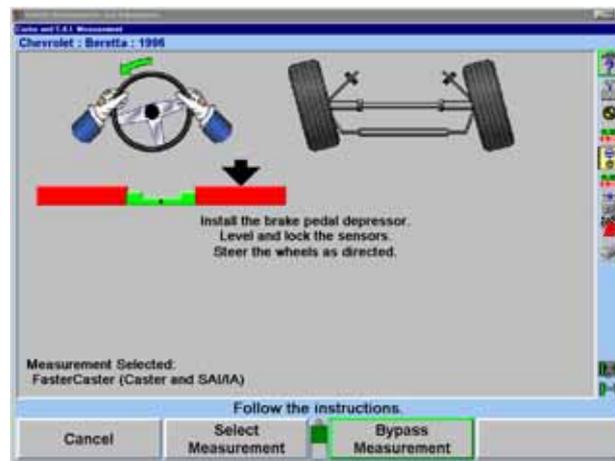


“OK”

S.A.I.



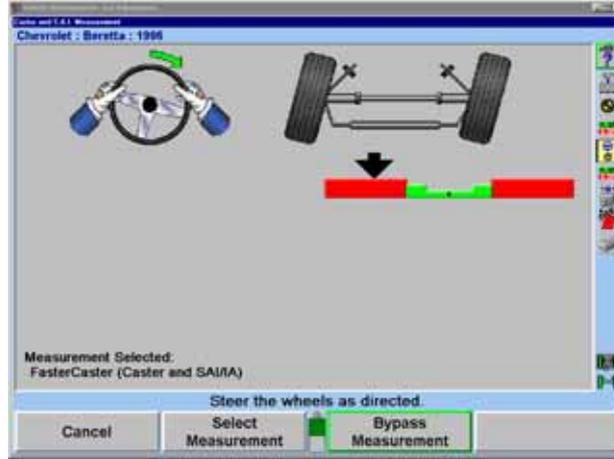
“ ”



가

가

가



가

가

가

가

S.A.I.

”

, S.A.I.

I.A.

:	<b>OEM</b>	<b>OEM</b>
---	------------	------------

DSP200/DSP250

DSP306/DSP308

(RH)

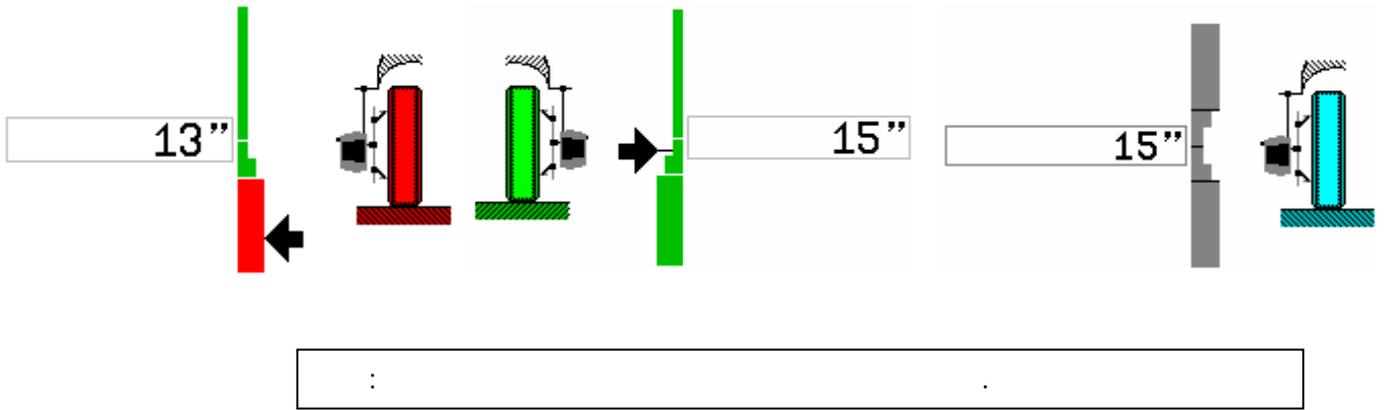
:	“ ”
DSP306/308	DSP200/250

“ ”

가

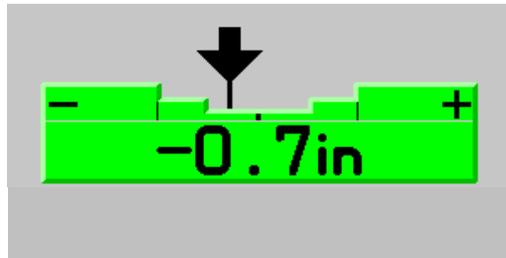
“ ”

가

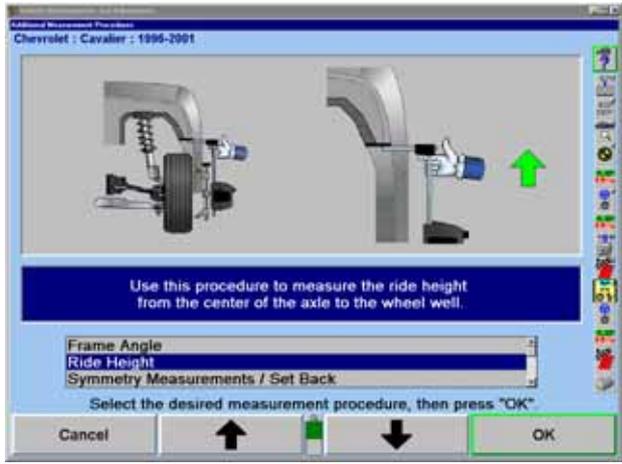


:

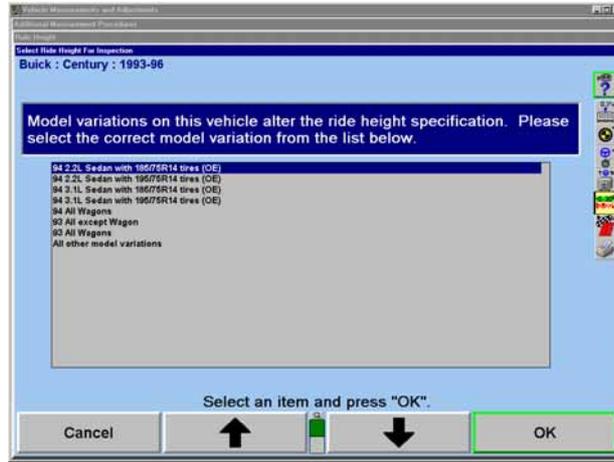
가



가



가



“↑” “↓”  
“ ”

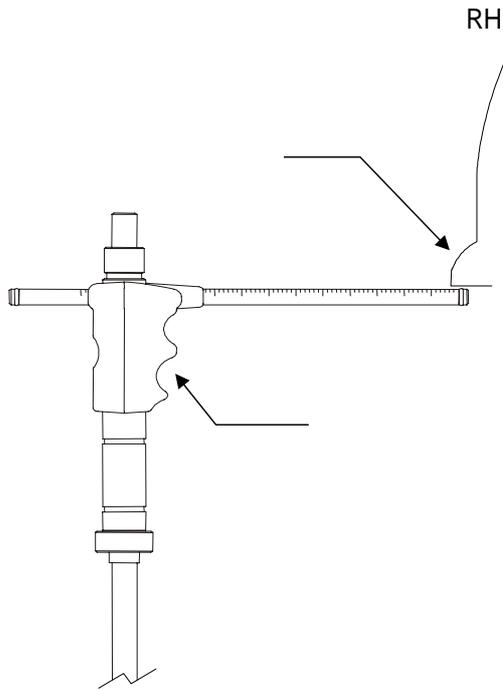
:

가 :

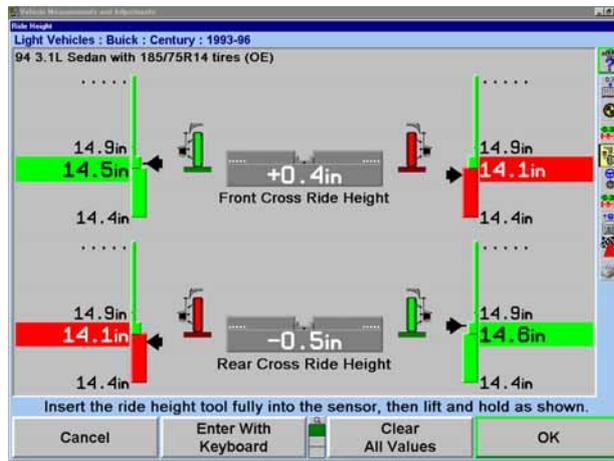
RH :

RH 가

:



가 RH



RH

:	RH
---	----

“OK”

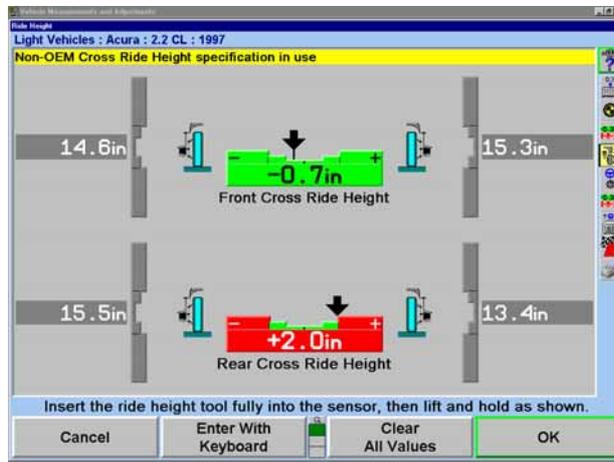
가

RH

: RH

RH 가

:



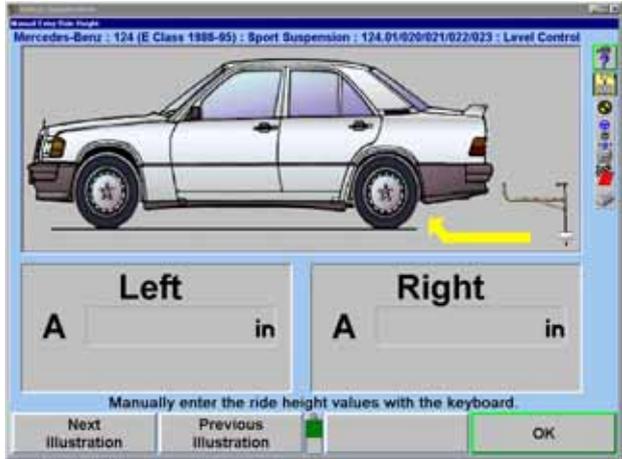
“Tab” , “Enter” “Shift + Tab”

“OK”

“Enter” “Tab” “Shift + Tab”

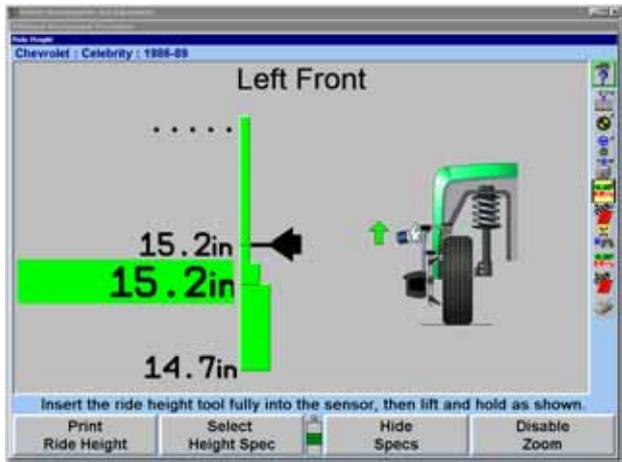
:

WinAlign



RH

가



10

가

: 가

“ ”

# ExpressAlign™

ExpressAlign™

. ExpressAlign

가

ExpressAlign

:

( , WinToe CMM )

ExpressAlign

가

: ExpressAlign

ExpressAlign

가

ExpressAlign

가

ExpressAlign

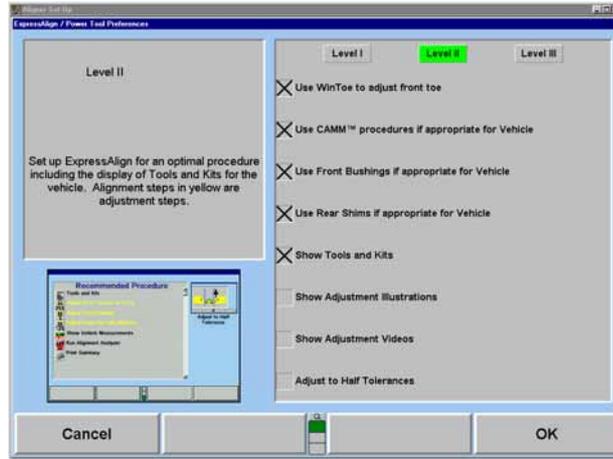
|

가

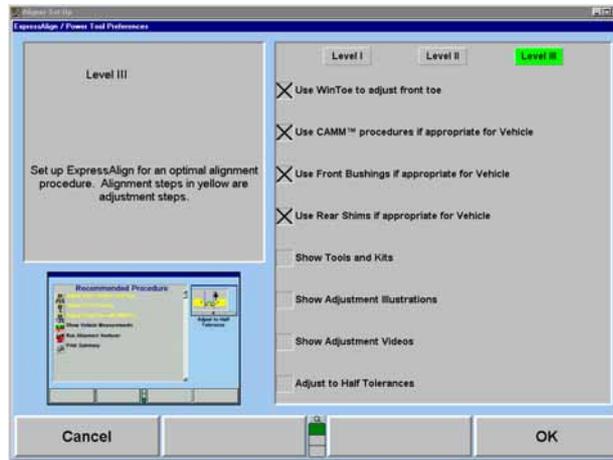


II

가



III



ExpressAlign

WinToe®

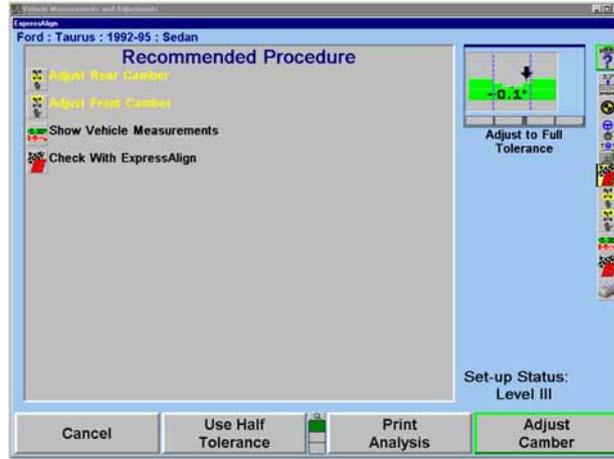
CAMMTM

ExpressAlign “ ”  
“ExpressAlign ”

ExpressAlign 가

ExpressAlign “ExpressAlign”  
ExpressAlign “ ”

가 “Express  
Align”



: “ExpressAlign”

ExpressAlign  
가

“ExpressAlign”

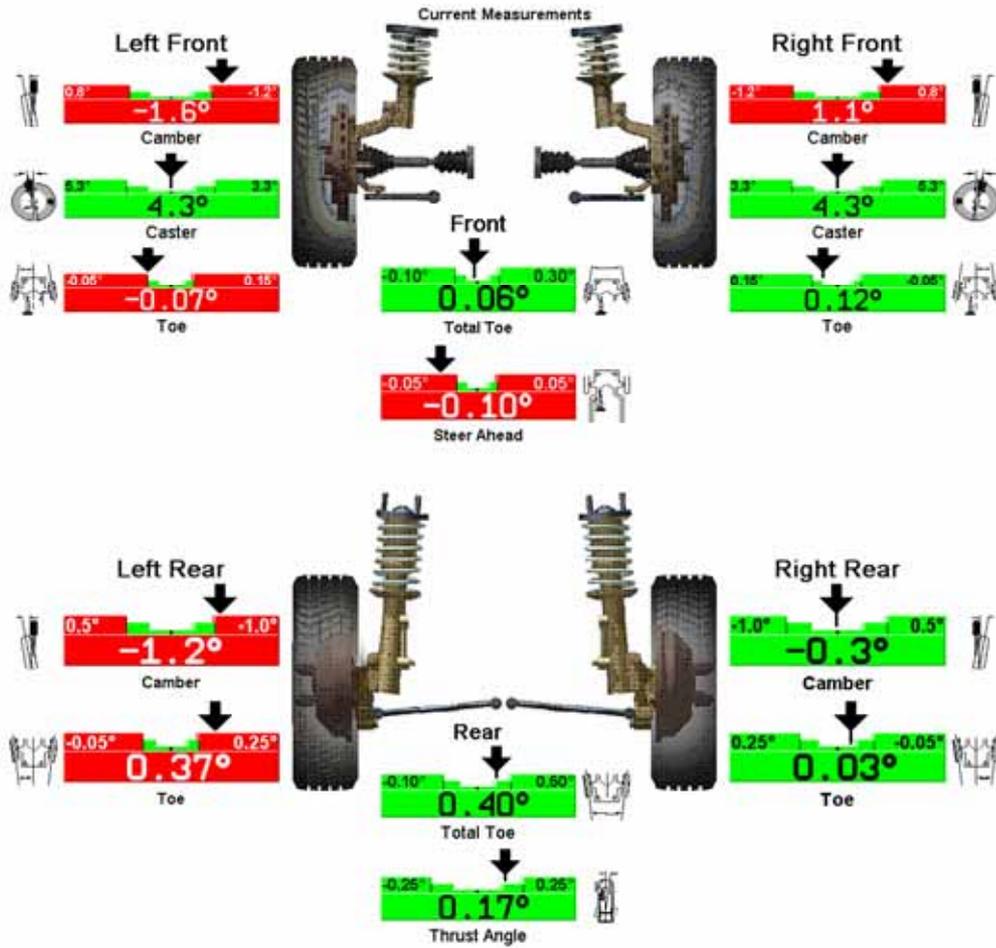
ExpressAlign

“ExpressAlign”

“ExpressAlign” “ ”

**Name** JOE CUSTOMER  
**Address** 11 MAIN  
 ST. LOUIS, MO 63011  
 314-636-5555  
**Telephone**  
**Vehicle (VIN)**  
**License** VBA111  
**Color** YELLO  
**Year:** 99  
**Technician** JIM  
**Mileage** 45189  
**Time Printed** 10/8/01 2:50 PM

**ExpressAlign**  
 Chevrolet : Cavalier : 1996-2001



- 1.
  - 2.
  3. WinToe
- .....
- 

“ExpressAlign”

“ ”

ExpressAlign

”

가

ExpressAlign

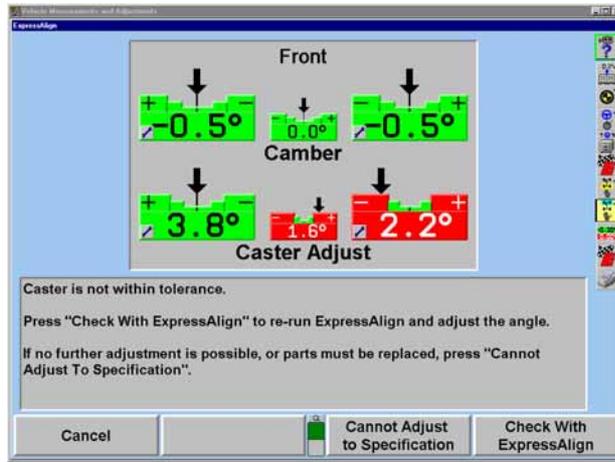
가 “ ”,

“

”

“ExpressAlign”

”



“ ”

“

”

가

“

”

ExpressAlign

“ExpressAlign  
“ExpressAlign”

”

가

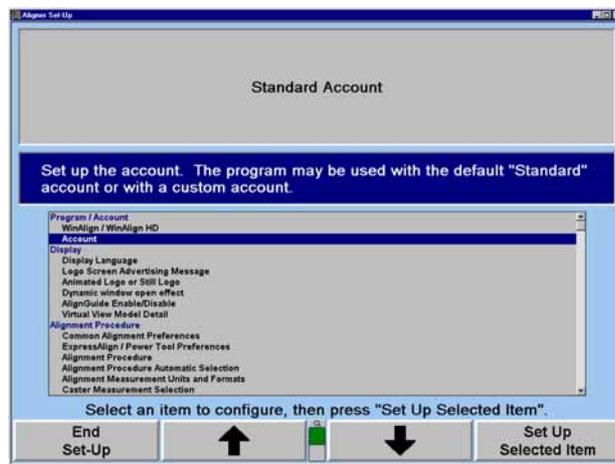
“ExpressAlign”

가

“ ”

“ ”

“ ” “ ”



. WinAlign

CNTL + Shift + K1  
WinAlign

“ ”

“ ”



“OK”

가



12 24	12
	/ /
	: A, O
	C111 A
/	
	2 . 가
	C: Backup.dat

“ ”

“↓” “↑”

“ ”

<b>Program / Account</b>	
WinAlign / WinAlign HD	
<b>Account</b>	
<b>Display</b>	
Display Language	
Logo Screen Advertising Message	
Animated Logo or Still Logo	
Dynamic window open effect	
AlignGuide Enable/Disable	
Virtual View Model Detail	
<b>Alignment Procedure</b>	
Common Alignment Preferences	
ExpressAlign / Power Tool Preferences	
Alignment Procedure	
Alignment Procedure Automatic Selection	
Alignment Measurement Units and Formats	
Caster Measurement Selection	
Reduce Number of Softkeys: Enable/Disable	
Enable / Disable Manufacturer Specific Procedures	
Set Vehicle Selection Options	
Default Vehicle Specification	
<b>Bar Graphs</b>	
Front Axle Bar Graph Groups	
Rear Axle Bar Graph Groups	
Cross Bar Graph/Additional Cross Angles: Enable/Disable	
Show Specs on Bar Graphs: Enable/Disable	
<b>Printer</b>	
Printer	
Print Language	
Printout Advertising Message	
Printout Warning Message: Enable/Disable	
Report Format	
<b>Sensors</b>	<b>Sensors</b>
Sensor Type	Sensor Type
Toe-Out-On-Turns Device	Toe-Out-On-Turns Device
Update Sensor Software	Update Sensor Software
Conventional Sensors Compensation Options	DSP400 Alignment Reference
HF Channel Selection	DSP400 Compensation Procedure
Calibration Reminder	DSP400 Compensation Options
	HF Channel Selection
<b>Power Tools</b>	
Rear Shim Default Brand	
Rear Shim Display Size	
Front Bushing Default Brand	
Virtual View Enable/Disable	
<b>Inspection</b>	
Select Inspection Mode	
<b>Date and Time</b>	
Date and Time	
12 or 24 Hour Clock Display	
Date Format	
<b>Aligner Equipment</b>	
Calibrate Lightpen	
Remote Control Channel Identification	
Select Logging Type	
<b>Transmit Measurements</b>	
Transmit Measurements Destination	
Transmit Measurements Format	
<b>Work Management</b>	
Work Order Format	
<b>Logon</b>	<b>Logon</b>
Logon: Enable/Disable	Logon: Enable/Disable
	Logon Registry
	Logon Password
<b>Tread Depth</b>	Automatic Backup Options
Define Tread Depth Specification	

가

# 가

가

3-

가  
WinAlign

가

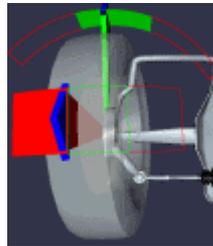
3-

( - )

가

가

3-



: 3- 가

가 611

“ 가 ” “ 가 ”

가

가  
가



Plan View

Plan View

가

가

가

가

가

가  
가

가



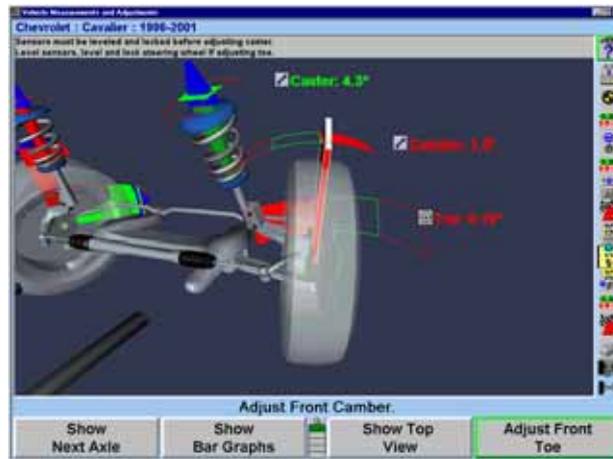
가

가

가

가





3-  
가



OJT 가

- WinAlign 가
- 
- 

OJT

WinAlign

CD-ROM

OJT



OJT

가

가



OJT

가

“ ”

“ 가 ”

WinAlign

OJT

“ ”

OJT

“ ”  
가

# VideoTech

## VideoTech

VideoTech  
DVD가

VideoTech CD

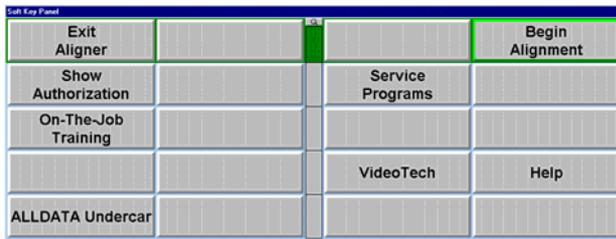
“VideoTech” , , 가  
“VideoTech”

VideoTech

## VideoTech

VideoTech

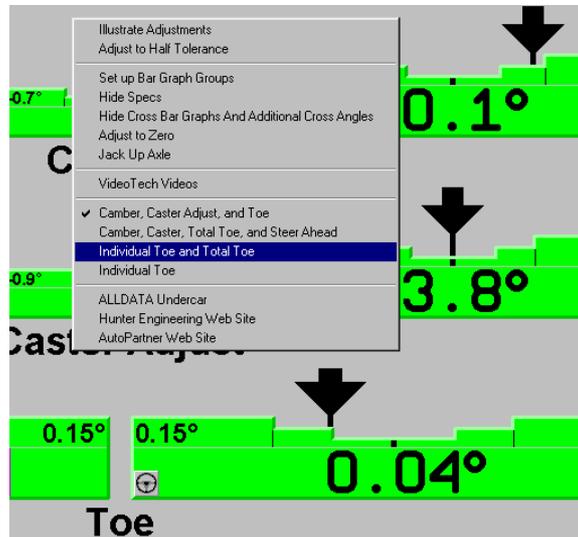
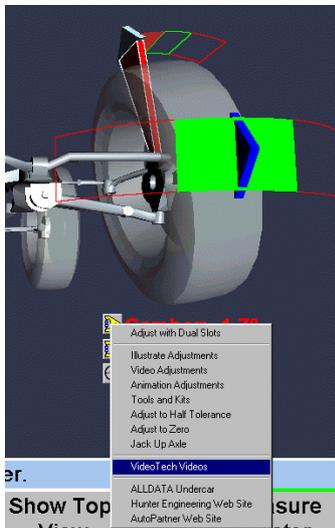
“VideoTech” “VideoTech” 가  
“VideoTech” “



“VideoTech”

“VideoTech”

가



# VideoTech

“VideoTech” CD

DVD

CD/DVD

“VideoTech”

가



“ ”

---

WinAlign

WinAlign

WinAlign

: WinAlign

WinAlign

가

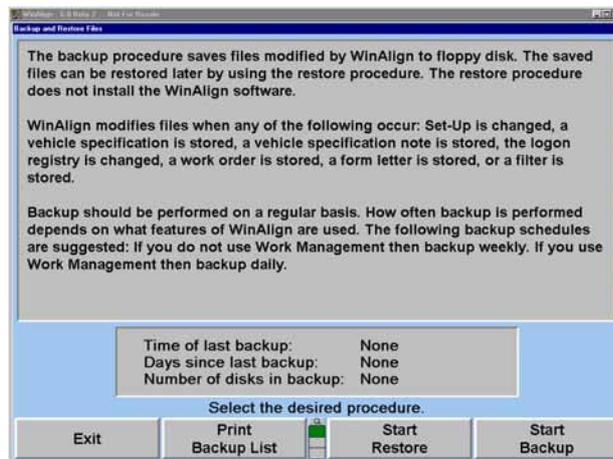
가

가

WinAlign

/

WinAlign



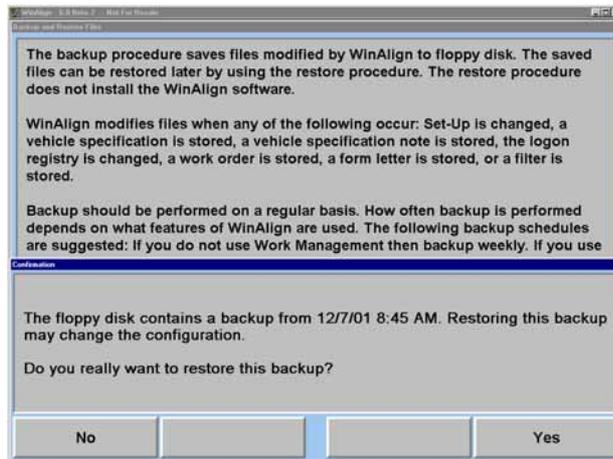
: WinAlign  
가 .

“ ” K4 . WinAlign A

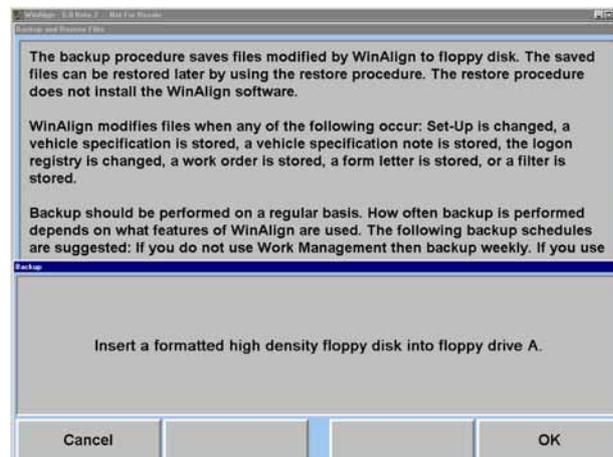
A

WinAlign 가 , - 가  
가 가  
WinAlign 가 “OK”

: “ ” WinAlign

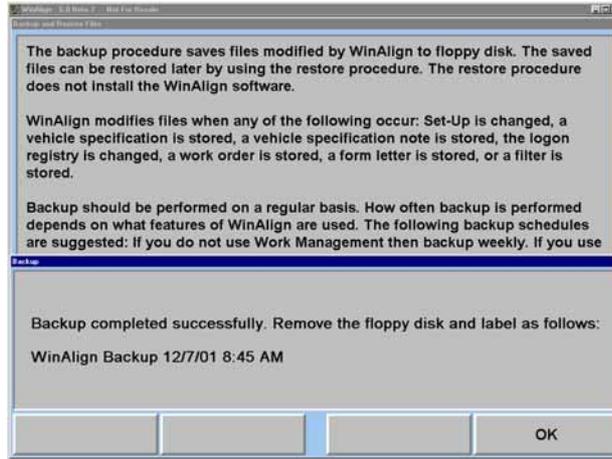


가 WinAlign  
“WinAlign”



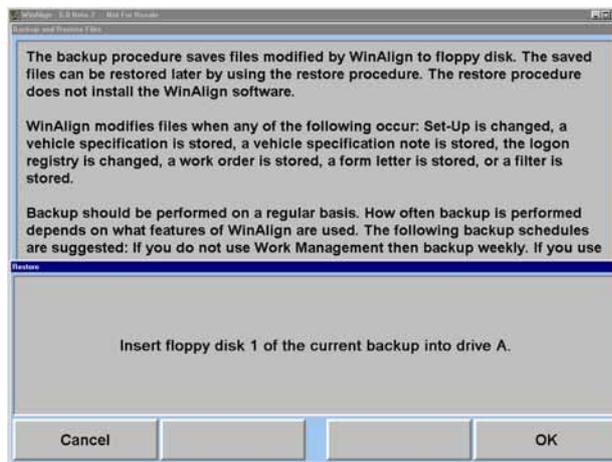
WinAlign  
“OK”

가 .

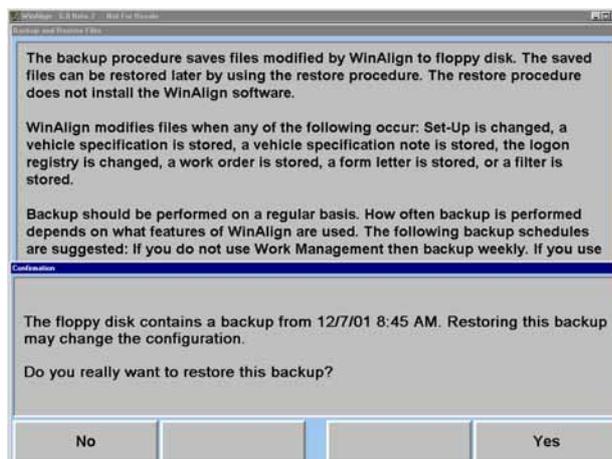


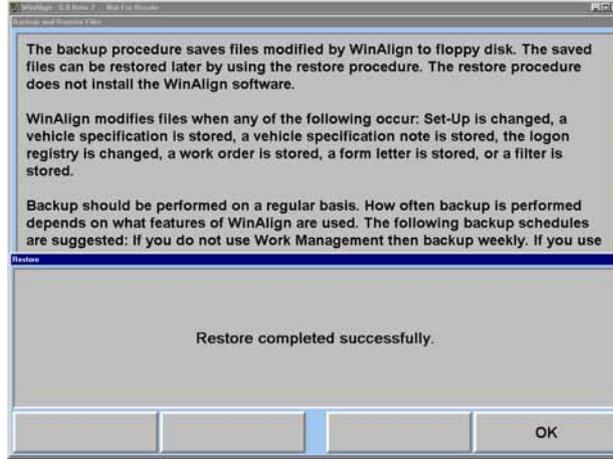
( )

“WinAlign



“ ”



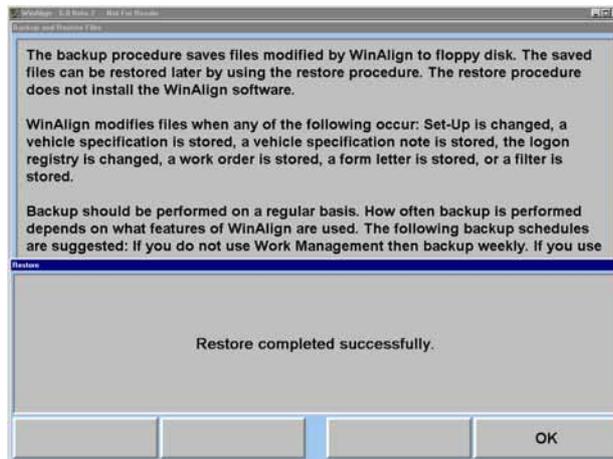


가 가 , WinAlign ( )

: 가 가 “ ”

: WinAlign WinAlign 가  
WinAlign WinAlign 가

“ 가 ” “OK”



Hunter WinAlign 가  
 611 Hunter 가



Hunter / 가

WinAlign 가  
 Training™ ( ) MPEG (Just-In-Time WinAlign  
 CD-ROM  
 WinAlign !  
 WinAlign 가  
 가 CD-Video CD-Photo 가