


DRIVING WITH ADAPTIVE EQUIPMENT

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ESTABLISHED IN 1974

- ▶ Mandated by Congress
 - ▶ Public Law 93-538
 - ▶ Originally 26 Driver Evaluation Centers
 - ▶ Currently 45 Evaluation Centers
 - ▶ PMRS Therapists provide this Service –
Classified as Driver Rehab Specialist
- 

PALO ALTO PROGRAM

- ▶ Established in 1975
 - ▶ Referring Center for VISN 21
 - ▶ 3 High Tech Vans and 2 Sedans
 - ▶ Driving Adaptive Equipment
 - ▶ Safe Driving Assessments
 - ▶ Education in the DMV Process
 - ▶ Scooter Lift Evaluations
 - ▶ Driver Simulation Training
 - ▶ GPS Training
- 


6 LEVEL PROGRAM

- ▶ Driving Adaptive Equipment Evaluations with Vehicle Modifications
 - ▶ Safe Driving Assessments with or without adaptive equipment
 - ▶ Follow-up Driver Training
 - ▶ DMV Interaction
 - ▶ Simulator Training
 - ▶ GPS Training
- 


REFERRING SERVICES

- ▶ Physical Medicine and Rehabilitation
 - ▶ Prosthetic Service
 - ▶ Spinal Cord Injury Service
 - ▶ Orthopedic
 - ▶ Outpatient Clinics
 - ▶ Geriatric Clinics
 - ▶ Neurology
 - ▶ Polytrauma
 - ▶ PTSD Program
- 

REFERRAL PROCESS

- ▶ Physician Generated Consult
 - ▶ Prosthetic Request
 - ▶ Veteran Request
 - ▶ Inter-facility Consults
- 


STANDARDS OF PRACTICE

- ▶ Clinic Interview
 - ▶ Clinic Assessment
 - ▶ Orientation to Vehicle
 - ▶ Behind the Wheel Assessment
 - ▶ Behind the Wheel Functional
 - ▶ Recommendations for Driver Training
 - ▶ Patient Education
 - ▶ Vehicle Inspection
- 


WHEN CAN I RESUME DRIVING?



INITIAL EVALUATION

- ▶ SCI – 4 to 12 Months Post Injury
 - ▶ TBI – Up to One Year Post Injury
 - ▶ CVA – Up to One Year
 - ▶ MS – As Needed per Progression
 - ▶ Ortho – Pain Free and Functional ROM
 - ▶ Neuro – Seizure Free up to 6 Months
 - ▶ Medically Stable
- 


CLINIC INTERVIEW

- ▶ Driving History
 - ▶ DMV Status
 - ▶ Vehicle Status
 - ▶ Driver or Non Driver
 - ▶ Type of Evaluation – Van or Sedan
- 


CLINIC ASSESSMENT

- ▶ Medical History
 - ▶ Sensory
 - ▶ Motor
 - ▶ Range of Motion
 - ▶ Balance
 - ▶ Cognition Screening
 - ▶ Vision
 - ▶ Wheelchair Evaluation
 - ▶ DMV Rules & Regulations
- 


ORIENTATION TO VEHICLE

- ▶ Van or Sedan
 - ▶ Adaptive Equipment Evaluation
 - ▶ Transfer Skills / Wheelchair Driver
 - ▶ Sedan Wheelchair Stowage
 - ▶ Safe Vehicle Ingress / Egress
- 


BEHIND THE WHEEL ASSESSMENT

- ▶ Types of Driving Adaptive Equipment
 - ▶ Safe Driving Assessments
 - ▶ Overall Driving Skills
 - ▶ Overall Functional Skills
 - ▶ Assessed on a Comprehensive Driving Course
(hospital > residential > complex commercial
> expressway > freeway > mountain)
- 


BEHIND THE WHEEL FUNCTIONAL

- ▶ Position and body awareness problems
 - ▶ Difficulty with accurate foot placement on pedals
 - ▶ Difficulty moving from gas to brake
 - ▶ Decreased accuracy with steering
 - ▶ Muscle strength
 - ▶ Coordination & dexterity
 - ▶ ROM
 - ▶ Endurance
- 


RECOMMENDATIONS

- ▶ Appropriate Number of Driving Lessons with Recommended Adaptive Equipment
 - ▶ Vehicle, Vehicle Modifications, and Driving Adaptive Equipment Recommendations Routed to Prosthetics
 - ▶ Prescription Routed To Approved Vendor
 - ▶ Progress Note Entered in Electronic Medical Record
- 


PATIENT EDUCATION

- ▶ Vendor Selection
 - ▶ Vehicle Purchase
 - ▶ Final Driving Goals
 - ▶ Veteran / Caregiver Educated in the Proper Use of Adaptive Equipment
- 

FINAL VEHICLE INSPECTION

- ▶ At Vehicle Completion, the Vehicle is Inspected by the Driver Rehab Specialist
 - ▶ Follow up Driver Training is Scheduled
 - ▶ Veteran is Present at Final Inspection
 - ▶ Any Adaptive Equipment Problems can be Resolved at this Time
- 

DRIVER SIMULATION STATIONS

- ▶ Mimic on-road Performance in a Protected Environment
 - ▶ Able to Record Driving Deficits
 - ▶ Track Overall Driving Skills
 - ▶ Ability to place Hazards in the Driving Environment Forcing the Participant to React
- 



08/08/2004



08/08/200

ASSISTIVE TECHNOLOGY




LEFT ARM AND LEFT LEG AFFECTED

- ▶ Steering Device for Right Hand
 - ▶ Remote Turn Signal Lever
- 



01/10/2004

RIGHT ARM AND LEFT LEG AFFECTED

- ▶ Steering Device for Left Hand
 - ▶ LH Gear Shift Selector Lever
 - ▶ Left Foot Accelerator
- 



01/10/2004



01/10/2004

BOTH LEGS AFFECTED

- ▶ Hand Controls
 - ▶ Steering Wheel Orthotic Devices
- 

STEERING WHEEL ORTHOTIC DEVICES

- ▶ Most Functional Arm on the Steering Wheel
- ▶ Steering Wheel Counter Weight
- ▶ Attempt to Keep the Orthotic Device at the 8 or 5 O'Clock Position on the Wheel








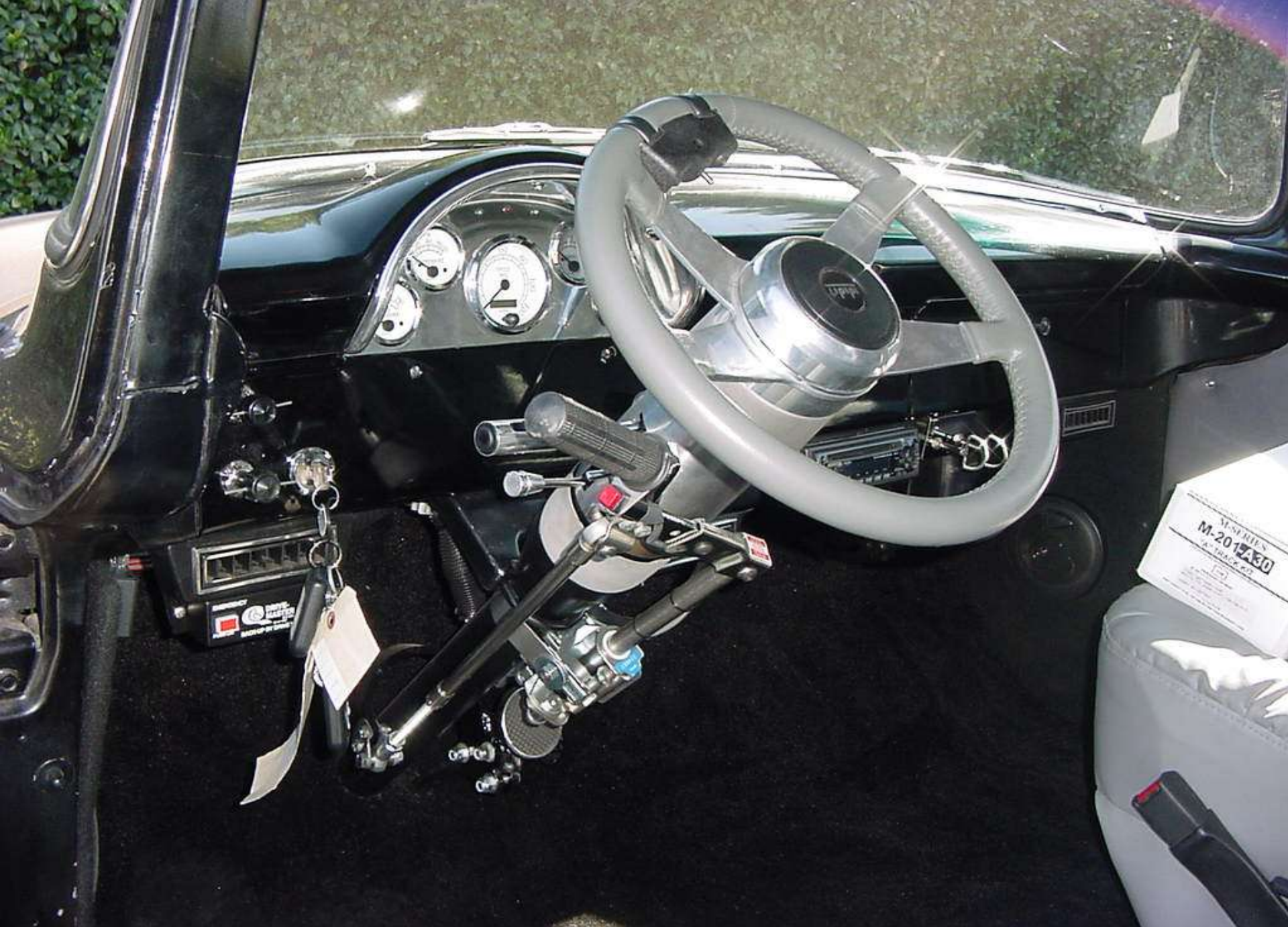


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HAND CONTROLS

- ▶ Mechanical Hand Controls
 - Push Right Angle
 - Push Twist
 - Push Pull

 - ▶ High Tech Servo Controls
 - Electronic Gas / Brake
 - Pneumatic
- 



MANHATTAN
M-2012A30
A-TRUCK-012







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Air Touch

EXTREME

Gas Brake
EX 430041

WARNING
READ THE OWNER'S MANUAL
FOR USE
• The vehicle has been specially
designed
• Do not drive the vehicle without
proper training
• Do not operate these controls in
other vehicles or situations without
proper training
For assistance call
1-800-830-7837

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INC.
TRADE MARK
www.craneandstrots.com

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WARNING: THIS COMPONENT
IS DESIGNED FOR A
SPECIFIC APPLICATION. DO NOT
MODIFY WITHOUT PROPER
INSTRUCTIONS.

DX-001


WARNING
SPINNING WHEELS
KICK-UP AND
KICK-FLIP CLEAR

30/10/2003



10/05/2004

STEERING SYSTEMS

- ▶ Factory Steering
 - ▶ Low Effort Steering
 - ▶ Zero Effort Steering
 - ▶ Foot Steering
- 



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SECONDARY CONTROLS

- Touch Pads
- Key Holder
- Rocker Switch
- Elbow Switches



30/10/2003


















EEI CREATIVE CONTROLS
 Troy, Michigan 248-577-9600

TEMP MODE


 FRONT FAN REAR FAN



Crescent Industries





MEMORY SHIFT
 BRAKE PEDAL MUST BE DEPRESSED
 TO OPERATE MEMORY SHIFT

HTECH BY **CREATIVE CONTROLS INC.**
 248-577-9600

CAUTION
 make sure wheelchairs
 are fully engaged into
 the brake lock

WARNING
 System
 disabled

EZLOCK

LO HI
 REAR REAR CTRL OFF
 COOL WARM

VENT
 NORM A/C
 MAX A/C

VOL PUSH ON

AM FM

DISC

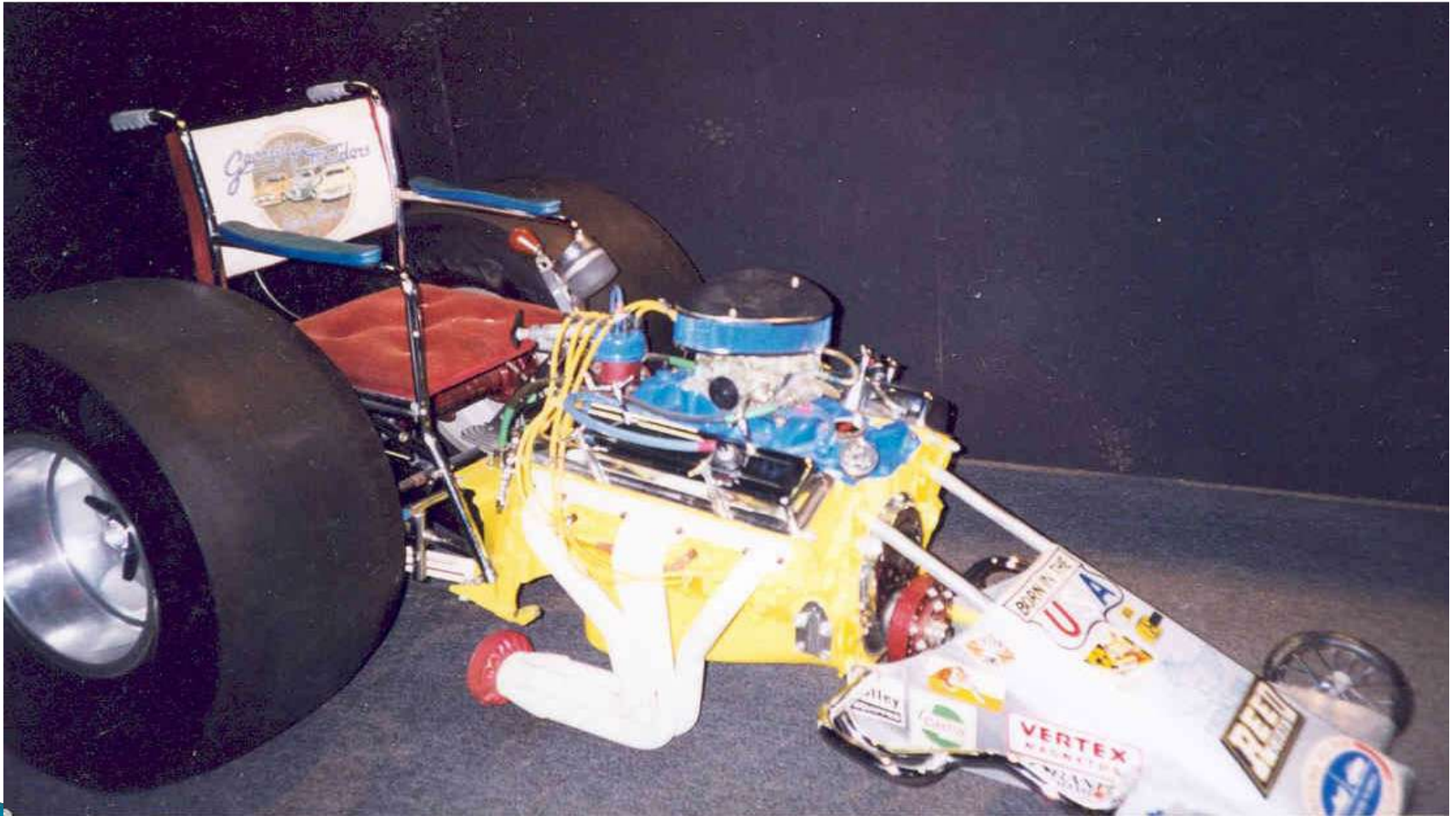
TAPES

BASE TRER SEL BAL FADER

1 2 3 4 5

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HIGH TECH DRIVING SYSTEMS





WARRANTY

Emergency
Light
System
Warning

08/08/2004

WARRANTY







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DRIVER STATION

- ▶ Wheelchair Driver
- ▶ Driver Transfer



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04/10/2004






09/03/2004





VAN MODIFICATIONS

- ▶ Floor Drops
 - ▶ Raised Roof and Doors
 - ▶ Automatic Door Openers
 - ▶ Gas Tank Modifications
 - ▶ Body Raises
 - ▶ Drive Shaft Modifications
- 



SOLD
but we have more






30/10/2003



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LIFTS FOR FULLSIZE VANS

- ▶ Side or Rear Mount
 - ▶ Double Post Platform
 - ▶ Single Post Platform
 - ▶ Under Vehicle Lift
- 





UYV









MINI VAN CONVERSIONS

- ▶ Chrysler Products
 - ▶ Toyota Sienna
 - ▶ GMC Products
 - ▶ Honda Odyssey
- 



BraunAbility

*Because Life is a Moving Experience**

Entervan® Xi

Rounding out BraunAbility's complete line of wheelchair vans, the Entervan Xi is a convenient alternative for wheelchair users who travel often with ambulatory passengers. The Xi features an in-floor ramp that slides out from underneath the floor, allowing clear and unrestricted entry and exit through the passenger door. Greater interior maneuverability is just one more benefit of this new conversion.

Available on the Dodge/Chrysler chassis, the Entervan Xi offers all the benefits of a BraunAbility conversion with an in-floor ramp. It's just one more addition to our already versatile fleet of accessible vehicles. See your BraunAbility Dealer for a closer look today!

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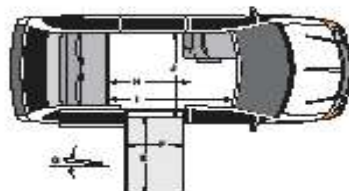
www.BraunAbility.com



Easy Access
The Entervan Xi features an in-floor ramp that keeps the side passenger door unobstructed for ambulatory passengers.



All dimensions are for reference only.



Door Opening Usable Width (Slide Door)	A	32"
Door Opening Usable Height (Slide Door)	B	53"
Interior Height at Center of Van*	C	57-1/4"
Interior Height at Driver & Passenger Position**	D	56-1/4"
Ramp Length	E	56-1/4"
Ramp Width (Usable Clear Opening)	F	31"
Ramp Angle (Vehicle Kneeled/Power Conversion)	G	10.5°
Interior Floor Length (Behind Front Seats)	H	57"
Overall Interior Floor Length (Flat Area)	I	86"
Interior Width at B Pillars	J	59-1/4"


* Deduct 2-1/2" for vans with Overhead DVD/Rail System. ** Deduct 3-1/4" for vans with Moon Roof. Due to manufacturing tolerances both with the OEM vehicle and the conversion components, all dimensions may vary slightly from those shown.





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SCOOTER LIFTS

- ▶ Rear Platform
 - ▶ Trunk
 - ▶ Swing In
 - ▶ Swing Out
 - ▶ Chair Topper
- 



Chair Topper



THE BRAUN CORPORATION

04/10/2004





SEUND

Z71
OFF ROAD







