

Your handicap – our motivation

# Haverich

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# What You should know about Us

In 1954, Walter Haverich, senior create a small production plant for building bicycleframes. In 1960, the famous Haverich tricycle with detachable rear axle was introduced. In 1979 the demand for cycles, individual parts and cycles for the physically challenged grew to a point that the firm constructed a modern manufacturing plant on Striegauer Street. The plant area occupies 12,000 square meters. In 1988 the plant had been enlarged up to 4,500 square meters.

In 1990, the firm's founder, Walter Haverich, senior died. His three sons continue the enterprise with the same philosophy. Just as with "The Original Team", today's coworkers, working in ultra-modern production plants, carry on the tradition of quality, building products that improve the mobility and rehabilitation possibilities for physically challenged individuals.

Haverich adaptive cycles have enjoyed a good reputation over the past 5 decades in the field of physical and rehabilitation therapy. The first Haverich adaptive cycles were developed in co-operation with the University of Münster, orthopedic clinic. They were first used in the rehabilitation of patients with poliomyelitis. Today, their use is not confined to the rehabilitation facility but they are found general use outside of the hospital. The exercise of cycle riding has particular benefits for individuals with cerebral palsy as it improves the muscle tone.

All Haverich cycles, including tricycles, therapy bicycles with stabilizers or any one of our specialized line contribute to the independence and mobility of the challenged user. Each of our cycles is constructed with the specific needs of the used in mind. Body size, weight and specific limitations are critical factors when selecting the proper cycle. Proper design contributes to the success of the therapy program and the security of the user. Good habits developed in the early days are still with us today. Haverich specialized cycles are renowned for their design giving detailed regard to the needs of the disabled. Solid workmanship, constantly refined, has been joined by sophisticated technology in the field of small-scale mass production.

We are one of the largest continental European suppliers of two and three wheeled cycles for disabled not least of all due to our well balanced formula of time honored skilled crafts, modern technology and rigid quality control.

"For years, Haverich specialized cycles have been tested and prescribed at Münster University Clinic and Heinrich-Piepmeyer House. They are used to treat children with cerebral palsy. The foot rests and leg guides are also available for normal tricycles. The adjustable backrests are well designed for their intended purpose. These well made cycles prove to be an excellent therapeutic adjunct in daily practice."

### Signed: Prof. Dr. H. H. Matthiass, Münster

# Quick Finder

Our product line offers the largest number of options and models of adaptive cycles in the market. No matter the degree of limitations imposed by a physical challenge, models and adaptations are available so that you can enjoy cycling with your choice of adaptive equipment and color

The choice of models depends on your specific needs.

**Tricycles** are particularly suited for people with balance issues or with stability problems that require support of the trunk or feet.

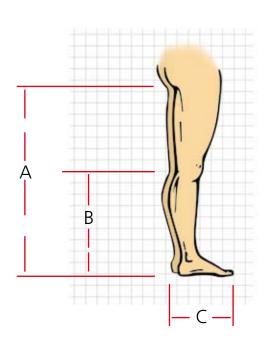
**Therapy Bicycles** provide exercise and mobility for persons with less restrictive challenges. Primarily they are used in the rehabilitation of persons with mild balance problems or age-related issues.

**Tandems** are the ideal exercise equipment for persons who require the assistance of a caregiver to operate the cycle. The choice between a two wheel and three wheel tandem depends on the specific limitations of the rider. If the rider requires assistance in mounting or dismounting the cycle or significant balance issues then the tricycle is best choice.



In addition to the standard frame, available in either steel or aluminium, our models feature the Haverich exclusive folding frame or the Ergo frame TE (easy entry) recently hono-

red by ADAC for design excellence.



Based on the following table, you can quickly determine the basic model and the catalog page that will meet your needs. The models shown are equipped with some optional accessories. The additional accessories are listed in the photo captions. Additional adaptive accessories are listed starting on page 33.

Model	Age	Leg le	ength cm	Weight Ibs (kg)	Weight capacity lbs (kg)	Page
Tricycles						
26/20 VATE 24" TE 26" TE 26" TEK 24" MTB 26" MTB 26" MTB 27" Racer	2 3 5 5 8 12 12 12 12 14 14 Adult Adult Adult Adult Adult Adult	12-17 17-22 20-25 20-25 24-30 24-30 28-34 28-34 28-34 28-34 28-35 28-35 31-38 31-38 31-38 31-38 31-38 30-38 28-35	32-43 43-56 42-56 50-63 50-63 60-75 72-85 72-85 72-85 72-85 72-85 72-87 72-87 78-97 78-97 78-97 80-97 80-97 80-97 78-97 70-90	$\begin{array}{c} 28 \ (13) \\ 33 \ (15) \\ 31 \ (14) \\ 40 \ (18) \\ 37 \ (17) \\ 46 \ (21) \\ 51 \ (23) \\ 51 \ (23) \\ 57 \ (26) \\ 57 \ (26) \\ 57 \ (26) \\ 57 \ (26) \\ 66 \ (30) \\ 73 \ (33) \\ 73 \ (33) \\ 66 \ (30) \\ 66 \ (30) \\ 66 \ (30) \\ 66 \ (30) \\ 73 \ (33) \\ 66 \ (30) \\ 66 \ (30) \\ 73 \ (33) \\ 66 \ (30) \\ 73 \ (33) \\ 66 \ (30) \\ 73 \ (33) \\ 66 \ (30) \\ 73 \ (33) \\ 66 \ (30) \\ 73 \ (33) \\ 66 \ (30) \\ 73 \ (33) \\ 66 \ (30) \\ 73 \ (33) \\ 66 \ (30) \\ 73 \ (33) \\ 66 \ (30) \\ 73 \ (33) \\ 66 \ (30) \\ 79 \ (36) \\ \end{array}$	$\begin{array}{c} 77 \ (35) \\ 110 \ (50) \\ 110 \ (50) \\ 132 \ (60) \\ 132 \ (60) \\ 165 \ (75) \\ 165 \ (75) \\ 200 \ (90) \\ 200 \ (90) \\ 220 \ (100) \\ 220 \ (100) \\ 220 \ (100) \\ 220 \ (100) \\ 220 \ (100) \\ 220 \ (100) \\ 220 \ (100) \\ 220 \ (100) \\ 220 \ (100) \\ 220 \ (100) \\ 220 \ (100) \\ 220 \ (100) \\ 220 \ (100) \\ 220 \ (100) \\ 220 \ (100) \\ 265 \ (120) \ (12$	9 10 11 11 12 13 13 14 15 16 16 18 18 17 18 17
16" ALU 16" 20" Size I ALU 20" Size II 20" Size II 20" Size II TE 20" Size III 20" Size III TE 24" 4"	3 5 5 8 12 12 14 14 Adult Adult	17-22 17-22 20-25 20-25 24-30 24-30 28-34 28-34 28-35 28-35 31-38 31-38	43-56 43-56 50-63 60-75 60-75 70-85 70-85 72-87 72-87 78-97 78-97	37 (17) 40 (18) 42 (19) 44 (20) 48 (22) 48 (22) 50 (23) 55 (25) 55 (25) 55 (25) 55 (25)	110 (50) 110 (50) 132 (60) 165 (75) 165 (75) 198 (90) 220 (100) 220 (100) 242 (110) 242 (110)	24 25 25 26 26 27 27 28 28 28 29 29
	12 14 Adult	28-33 28-35 31-38	70-85 72-87 78-97	62 (28) 62 (28) 66 (30)	198 (90) 220 (100) 242 (110)	30 31 31
Tandems		24.26	60 PF		2.55 (12.2)	
2 wheel 20" MK rear	8	24-30	60-75	66 (30)		22
2 wheel 20" EW rear		28-34	70-85	66 (30)	330 (150)	22
2 wheel 26" rear 3 wheel 20" MK	Adult 8	30-36 24-30	75-90 60-75	70 (32)	353 (160)	21 20
rear 3 wheel 20" EW		24-30 28-34	70-85	88 (40)	265 (120)	20
rear	Adult	28-34 31-37		88 (40) 92 (42)		20 21

The correct selection of frame size and drive train depends on the body measurements of the user. Inseam length (dimension A on drawing below) and user weight are crucial factors in selecting the proper cycle that will offer a relaxed and healthy riding experience and a successful therapeutic result. No matter the extent of impairment, we are able to provide our clients with a new freedom of movement. Even our basic tricycle models allow challenged individuals a better integration and a higher degree of mobility. If the degree of impairment requires additional adaptations, we offer a wide range of alternative drives, seating and positioning adaptations. We are happy to offer customized solutions to specialized challenges. We are able to provide individualized answers to common problems and to develop a custom made solution for even the most difficult problems so that the health promoting aspects of bicycling may be enjoyed by all. A good example that our basic tricycle design it not the only solution we can offer to meet the needs of a specific problem is the development of our specialized cycles for people of "short stature." These cycles were developed to meet the needs of people of short stature who have a relatively high body-mass index (BMI). In the same manner, development of saddle, pedals, customizable crank length, handlebar modifications and specialized accessories offer solutions for almost every need. Many insurance companies and health plans reimburse patients for our cycles

Rugged frame design plus standard carrier, dual front wheel brake (caliper and drum) with parking brake lever, as well as precision ball bearings in rear axle and wheels ensure extremely smooth running. The vertically adjustable handlebars can also be positioned sufficiently forward of the rider so that he or she keeps his/her arms stretched and maintains an almost upright posture.

Seats can be adjusted so that with the pedal in bottom position the leg is straightened as much as possible at the knee joint. The selected gear ratios permit even severely disabled persons to ride a tricycle.

### HAVERICH-Specialized-Tricycle for congenital deformities and amputations of upper extremities.

Also available as a bicycle. For additional accessories request is needed.

26/20 Tricycle with dysmelie handlebar, directional signals, three speed freewheel hub with coaster brake and lights.

We want to improve You Mobility 20/16 Tricycle, hand and foot powered with following accessories: footrests with leg guides, standard backrest with padded strap, three speed hand powered drive, steering angle limiter lock

### HAVERICH-TRICYCLE

### Hand and foot powered, for patients with transverse lesion of the spinal cord (e.g. spina bifida) Available from Model 16/16 upwards.

Rigid drive train for forward and reverse riding, front caliper brake, dismountable rear axle. Folding frame available from Model 20/16 upwards. 3 speed freewheel hub with coaster brake available for manual drive train, reversing is then however not possible. **Dimensions:** see standard tricycle models

HAVERICH–TRICYCLE BA With hand and foot drive for paraplegia, amputations and congenital anomalies from model 16/16 upward.

Rigid drive for forward and reverse. Front wheel, caliper brake, detachable rear wheels. Starting from Model 20/16 available with folding frame. Can be fitted with 3-speed free-wheel hub with coaster brake. Reverse movement will not be available. Dimensions: see standard tricycles. **Dimensions:** see standard tricycle models

Model 24/20 BA with manual drive. Rigid drive for forward and reverse riding, foot platforms, backrest with padded strap, steering angle limiter lock

### HAVERICH

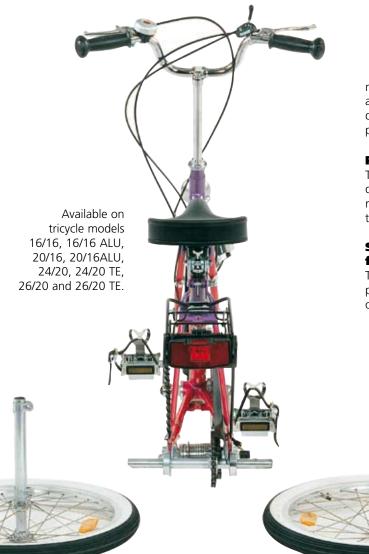
Small-Stature Bicycle 16" The specialized frame and components designed for small stature young people and adults who desire stability and robustness.

These special therapy cycles are an important step towards social integration. Configuration and design is coordinated with the needs and specifications of the respective customer. Configuration and design on request.

# Quick and easy to load into Car Trunk

The rear axle of Tricycle Models 16/16 and larger is detachable without removing the chain. This design, unique for tricycles for the disabled, allows the reduction of the cycle's overall width by more than two fifths with just a few turns of a wrench.

Starting from tricycle 20/16, the frame is hinged in front of the crank allowing the front wheel to fold backwards. This unique construction design from Haverich makes it possible to transport the cycle in a passenger automobile.



Rugged frame design plus standard carrier, dual front wheel brakes (caliper and drum) with parking lever, as well as precision ball bearings in the rear axle and wheels ensure an extremely smooth ride. The vertically adjustable handlebars can be positioned sufficiently forward of the rider so that he or she maintains an upright position.

Seats can be adjusted so that when a pedal is in the bottom position, the leg maintains a slight flex at the knee. The selected gear rations enable the most severely challenged individual to ride a tricycle.

Rear Hub Options



Our E-Bike-Option is now available for many of our

models. The sensor controlled hub motor facilitates starting and conserves strength on uphill routes. Many jurisdictions do not require a special license for this trend setting propulsion system.

### **Rigid drive train**

The basic version of our tricycles is equipped with a rigid drive train. Absence of a freewheel mechanism forces the rider to pedal continually which aids therapy. It also allows the rider to reverse the tricycle by back-pedaling.

#### Selectable rigid gear rim with freewheel option

The change-over takes place in the crank set. Thus it is possible that the caregiver can control the selection of pedal options, either continually pedalling or no pedalling.

### Freewheel hub with coaster brake

Back pedaling activates brake action.

### 3-speed freewheel hub with coaster brake

User-friendly shifting mechanism allows tricycle to be ridden in hilly terrain, too. Shifting is accomplished via handlebar mounted click lever. Coaster brake for safe stops.

### 3-speed freewheel hub, with backwards drive possibility and coaster brake

Modification of the coaster brake allows the possibility to drive backwards

# 3-speed H3130 freewheel hub with integral drum brake

Freewheel action allows back-pedaling without encountering resistance. Rider can thus easily turn cranks into the most suitable position before starting to pedal. Drum brake, integrated into rear hub is activated via handlebar-mounted lever.

### 5-speed freewheel hub with coaster brake

This 5-speed hub offers the rider a wide gearing range. Precision index grip shift lever allows shifting even while stationary. Hub is a sealed, maintenance-free system with coaster brake.

### 5-speed freewheel hub, with backwards drive possibility and coaster brake

Modification of the coaster brake allows the possibility to drive backwards

# 5-speed H5220 freewheel hub with integral drum brake

Same as for 3-speed freewheel hub, except that it offers the additional advantages of 5 speeds.

### 7-speed freewheel hub with coaster brake

7-speed index shifting system. Shifting is possible while stationary. Maintenance-free, sealed mechanism with coaster brake

# 7-speed H7220 freewheel hub with integral drum brake

Precision index grip shift lever allows shifting even while stationary. Hub is a sealed, maintenance-free system with coaster brake.

### **Differential gearing**

With a differential-driven rear axle, the driving power will transfer to both rear wheels. Particularly useful with larger tricycles so the traveling comfort is improved.



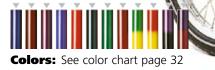
12/12 Aluminum Tricycle base model

### HAVERICH-TRICYCLE 16/16 For children from 3 to 6 years of age

**HMV:**: 22.51.02.0002 **Dimensions:** Minimum distance from seat top to pedal (in bottom position): 43 cm (17"), upward infinitely adjustable.

Overall width: (rear axle) 68 cm (27") Overall length: 120 cm (47") Weight limit: 50 kg (110 lbs) Wheel size: 47-305 (16 x 1,75 x 2) Standard equipment:

Removeable rear axle, rigid drive train for forward and reverse riding, dual front caliper and drum brake, parking brake lever.



Model 16/16 with accessories: footrests and leg guides, standard backrest and strap, steering angle limiter

### HAVERICH-TRICYCLE 16/16 ALU For children from 3 to 6 years of age

**HMV:** 22.51.02.0002 **Dimensions:** Minimum distance from seat top to pedal (in bottom position): 42 cm (16,5"), upward infinitely adjustable.

Overall width: (rear axle) 68 cm (27") Overall length: 123 cm (48,5") Weight limit: 50 kg (110 lbs) Wheel size: 47-305 (16 x 1,75 x 2)

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**Standard equipment:** Removeable rear axle, rigid drive train for forward and reverse riding, dual front caliper and drum brake, parking brake lever, basket.

**Colors:** See color chart page

16/16 ALU base model

### HAVERICH-TRICYCLE 20/16 For children from 5 to 8 years of age.

### **HMV:** 22.51.02.0003

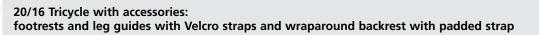
**Dimensions:** Minimum distance from seat top to pedal (in bottom position): 50 cm (20"), upward infinitely adjustable. **Overall width:** (rear axle) 78 cm (31")

Overall length: 135 cm (53") Weight limit: 60 kg (132 lbs) Wheel size: front 47–406 (20 x 1,75 x 2) rear 47–305 (16 x 1,75 x 2)

### Standard equipment:

Removeable rear axle, folding frame, rigid drive train for forward and reverse riding, dual front caliper and drum brake, parking brake lever

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### HAVERICH-TRICYCLE 20/16 ALU For children from 5 to 8 years of age.

### **HMV:** 22.51.02.0003

**Dimensions:** Minimum distance from seat top to pedal (in bottom position): 50 cm (20"), upward infinitely adjustable.

Overall width: (rear axle) 78 cm (31") Overall length: 145 cm (57") Weight limit: 60 kg (132 lbs) Wheel size: front 47–406 (20 x 1,75 x 2) rear 47–305 (16 x 1,75 x 2)

Standard equipment:

Removeable rear axle, rigid drive train for forward and reverse riding, dual front caliper and drum brake, parking brake lever, basket



20/16 ALU Tricycle base model



24/20 TE Tricycle low entry frame with accessories: 3 speed freewheel hub and coaster brake

### HAVERICH-TRICYCLE 24/20 For children from 8 to 12 years of age

HMV: 22.51.02.0004
Dimensions: Minimum distance from seat top to pedal (in bottom position): 60 cm (24"), upward infinitely adjustable.
Overall width: (rear axle) 78 cm (31")
Overall length: 155 cm (61")
Weight limit: 75 kg (165 lbs)
Wheel size: 47–406 (20 x 1,75 x 2)
Standard equipment:

Removeable rear axle, folding frame, rigid drive train for forward and reverse riding, dual front caliper and drum brake, parking brake lever, Gel seat



24/20 Tricycle with accessories: Footrests with leg guides and Velcro straps, wraparound backrest, shoulder strap, hip pads

### HAVERICH-TRICYCLE 26/20 TE For adults and children from 12 years of age

HMV: 22.51.02.0005 Dimensions: Minimum distance from seat top to pedal (in bottom position): 72 cm (28), upward infinitely adjustable. Overall width: (rear axle) 78 cm (31") Overall length: 160 cm (63") Weight limit: 90 kg (200 lbs) Wheel size: 47–406 (20 x 1,75 x 2) Standard equipment:

Removeable rear axle, low entry frame, rigid drive train for forward and reverse riding, dual front caliper and drum brake, parking brake lever, Gel seat

rs: See color chart page 32

26/20 TE Tricycle low entry frame with accessories: 5 speed freewheel hub with coaster brake and lights



### HAVERICH-TRICYCLE 26/20 For adults and children from 12 years of age.

**HMV:** 22.51.02.0005 **Dimensions:** Minimum distance from seat top to pedal (in bottom position): 72 cm (28"), upward infinitely adjustable.

Overall width: (rear axle) 78cm (31") Overall length: 155cm (61") Weight limit: 90 kg (200 lbs) Wheel size:

47–406 (20 x 1,75 x 2)

**Standard equipment:** Removeable rear axle, folding frame, rigid drive train for forward and reverse riding, dual front caliper and drum brake, parking brake lever, Gel seat



26/20 Tricycle with accessories: 3 speed freewheel hub with coaster brake, pedals with toe clips and lights

### HAVERICH-TRICYCLE 26/20 VATE For adolescents and adults **HMV:** 22.51.02.0005 Dimensions: Minimum distance from seat top to pedal (in bottom position): 72 cm (28"), upward infinitely adjustable. Overall width: (rear axle) 78 cm (31") Overall length: 165 cm (65") Weight limit: 100 kg (220 lbs) Wheel size: 47-406 (20 x 1,75 x 2) **Standard equipment:** Reinforced rear axle (removeable), rear mudguards, low entry frame, rigid drive train for forward and reverse riding, dual front caliper and drum brake, parking brake lever, lights, Gel seat **Colors:** See color chart page

26/20 VATE low entry frame with accessory: 3 speed free wheel hub with coaster brake

### HAVERICH-TRICYCLE 26/20 VA For adolescents and adults

### HMV: 22.51.02.0005

Dimensions: Minimum distance from seat top to pedal (in bottom position): 72 cm (28), upward infinitely adjustable. Overall width: (rear axle) 78 cm (31") Overall length: 160 cm (61") Weight limit: 100 kg (220 lbs) Wheel size: 47–406 (20 x 1,75 x 2) Standard equipment:

Reinforced rear axle (removeable), rear mudguards, foldable frame, rigid drive train for forward and reverse riding, dual front caliper and drum brake, parking brake lever, lights, Gel seat



26/20 VA Tricycle with accessories: 3 speed freewheel hub with coaster brake

26/20 VA Tricycle with accessories: 3 speed freewheel hub with coaster brake and large, rear-mount basket

# HAVERICH-TRICYCLE 24" TE for adolescents and adults

**HMV:** 22.51.02.0006 **Dimensions:** Minimum distance from seat top to pedal (in bottom position): 72 cm (28"), upward infinitely adjustable.

Overall width: (rear axle) 78 cm (31") Overall length: 180 cm (71") Weight limit: 100 kg (220 lbs) Wheel size: 47–507 (24 x 1,75 x 2) Standard equipment:

Removable rear axle, low entry frame, rigid drive train for forward and reverse riding, dual front caliper and drum brake, parking brake lever, lights, Gel seat.



24" TE Tricycle low entry frame with accessory: 7 speed freewheel hub with coaster brake and large, low-mount basket

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24" Tricycle with accessories: 3 speed freewheel hub with coaster brake

### HAVERICH-TRICYCLE 26" TEK For adults HMV: 22.51.02.0007 Dimensions: Minimum distance from seat top to pedal (in bottom position): 78 cm (31"), upward infinitely adjustable. Overall width: (rear axle) 78 cm (31") Overall length: 186 cm (74") Weight limit: 120 kg (265 lbs) Wheel size: 47-559 (26 x 1,75 x 2) **Standard equipment** Rigid drive train for forward and reverse riding, low entry frame, differential, dual front caliper and drum brake, parking brake lever, lights, large, low-mount rear basket, Gel seat. Colors: See color chart page 32

26" TEK tricycle, low entry frame with accessory: 7 speed freewheel hub with coaster brake



# HAVERICH-TRICYCLE 28" TEK For adults

**Dimensions:** Minimum distance from seat top to pedal (in bottom position): 70 cm (27,5"), upward infinitely adjustable.

Overall width: (rear axle) 78 cm (31") Overall length: 200 cm (78,5") Weight limit: 120 kg (265 lbs) Wheel size: 28" (47-622)

### Standard equipment:

3 speed freewheel with coaster brake, low entry frame, differential, front cantilever brake, large low-mount basket, steering damper, parking brake lever, lights with backup battery, Hub-Dynamo, Gel seat



Colors: See color chart page 32

### Tricycle 28" TEK with accessory: 7 speed freewheel hub with coaster brake, top case



Tricycle 27" Racer base model

### HAVERICH-TRICYCLE 24" MTB HAVERICH-TRICYCLE 26" MTB

Dimensions: Minimum distance from seat top to pedal (in bottom position): 24": 75 cm (30"), 26": 80 cm (31,5") upward infinitely adjustable. Overall width: (rear axle) 78 cm (31") Overall length: 24": 176 (69") 26": 187 (73,5") Weight limit: 100 kg (220 lbs) Wheel size: 24" (50-507)

26" (54-559)

### Standard equipment:

Reinforced rear axle and rear mudguards, 21 speed gear assembly, rear hydraulic brake, parking brake lever, lights, Gel seat, trip computer

# **Colore:** Soo color chart page 32

**Colors:** See color chart page 32

Tricycle 26" MTB base model

### HAVERICH-TRICYCLE 26" FEA For adults

### **HMV:** 22.51.02.0007

Dimensions: Minimum distance from seat top to pedal (in bottom position): 78cm (31"), upward infinitely adjustable. Overall width: (rear axle) 78cm (31") Overall length: 191 cm (75") Weight limit: 120 kg (265 lbs) Wheel size: 26" (47–559)

### Standard equipment:

3 speed freewheel with coaster brake, differential, front cantilever brake, full suspension spring–frame and spring–fork, large low-mount basket, steering damper, parking brake lever, lights

**Colors:** See color chart pa

26" FEA Tricycle with accessory: 7 speed freewheel hub with coaster brake

- The first Haverich tricycles with spring-fork and full suspension spring-
- frame. The spring element can be adjusted to the individual's body
- weight. The suspension framework reduces the impact on the spinal solume. The spring mounted front fork preserves the wrists and the
- column. The spring mounted front fork preserves the wrists and the shoulders. No longer does the challenged rider need to travel
- without comfort. Modern components and innovative bicycle
- technology led to these developments. On the new full suspension
- Haverich cycles, riding becomes

an experience.

# Rear Hub Options for Tandems

### 3-speed freewheel hub with coaster brake

User friendly shifting mechanism allows tricycle to be ridden in hilly terrain, too. Shifting is accomplished via handlebar mounted click lever or twist grip shift. Coaster brake for safe stops (Standard equipment).

### 5-speed freewheel hub with coaster brake

This 5-speed hub offers the rider a wide gearing range. Precision index gripshift allows shifting even while stationary. Hub is a sealed, maintenance-free system with coaster brake.

### **Differential gearing**

With a differential-driven rear axle, the driving power will transfer to both rear wheels. Particularly useful with larger tricycles so the traveling comfort is improved. Standard equipment with tricycle tandem.

Freewheel Crank set

The rear rider is not required to pedal.

# Which Type of Tandem is best for You and why the Caregiver sits in Front on Our Cycles

The basic criteria in deciding on a tricycle or bicycle tandem relate to the physical capacity of the challenged rider. If the tandem partner is limited in physical strength and requires either trunk, hand or feet support then the better selection is a tricycle tandem.

The reason why you will not find a HAVERICH–Tandem–Model on which the handicaped rider is sitting in the front position: Tandem cycles are usually employed when the challenged rider is either too young or the limitations are sever enough to preclude independent cycling. The caregiver

should always be in charge of directional and braking control. It is our belief that this will offer the safest riding experience and preclude dangerous steering situations.

### HAVERICH-TRICYCLE-TANDEM

20" MK For severely challenged, dysmelia and unsighted. Mother - child configuration.

### **Dimensions:**

Front: Minimum distance from seat top to pedal 73 cm (29"). Rear: Minimum distance from seat top to pedal 60 cm (24")

Overall width: (rear axle) 78cm (31") Overall length: 215 cm (85") Weight limit: 120 kg (265 lbs) Wheel size: 54–406 (20 x 2)

Standard equipment:

### Folding front frame, reinforced rear axle, rear mud-

guards, 3-speed freewheel hub with coaster brake, front drum brake, lock, lights, differential and Gel seat



Colors: See color chart page 32

Tricycle Tandem 20" Mother-child configuration with accessories: Footrests with leg guides and velcro straps, standard backrest with strap

# HAVERICH-TRICYCLE-TANDEM 20" EW

For severely challenged, dysmelia and unsighted. Adult configuration.

### **Dimensions:**

Front: Minimum distance from seat top to pedal 73 cm (29"). Rear: Minimum distance from seat top to pedal 70 cm (27,5") **Overall width:** (rear axle) 78 cm (31") **Overall length:** 220 cm (87")

Weight limit: 150 kg (330 lbs) Wheel size: 54–406 (20 x 2) Standard equipment:

Folding front frame, reinforced rear axle, rear mudguards, 3-speed freewheel hub with coaster brake, front drum brake, lock, lights, differential and Gel seat



**Colors:** See color chart page 32

Tricycle Tandem 20 " Adult configuration with accessories: Rear footrests with balancing weights and Velcro straps



#### **Dimensions:**

Front: Minimum distance from seat top to pedal 85 cm (33,5"). Rear: Minimum distance from seat top to pedal 80 cm (31,5")

### **Overall width:**

(rear axle) 78 cm (31") Overall length: 250 cm (98") Weight limit: 160 kg (353 lbs) Wheel size: 57–559 (26 x 2)

### Standard equipment:

Reinforced rear axle, rear mudguards, 3-speed freewheel hub with coaster brake, front drum brake, lock, lights, differential and Gel seat.



Tricycle Tandem 26" base model

# HAVERICH-BICYCLE-TANDEM 26" for severely challenged, dysmelia and unsighted.

### **Dimensions**:

Front: Minimum distance from seat top to pedal 80 cm (31,5"). Rear: Minimum distance from seat top

to pedal 75 cm (29,5") Overall length: 240 cm (94,5") Weight limit: 160 kg (353 lbs) Wheel size:

57–559 (26 x 2) **Standard equipment:** 

3-speed freewheel hub with coaster brake, front drum brake, lock, kickstand, lights



Bicycle Tandem 26" base model

Haverich



Bicycle Tandem 20", Mother-child size with accessory: 5-speed freewheel hub with coaster brake



Bicycle Tandem 20", Adult size with accessory: 5-speed freewheel hub with coaster brake

# Rear Hub Options for Therapy Bicycles

### **Rigid Drive train**

Allows forward and backward riding.

### Freewheel hub with coaster brake

The basic version of our therapy bicycles is equipped with freewheel hub with coaster brake. Back pedaling activates brake action.

### 3-speed freewheel hub with coaster brake

User friendly shifting mechanism allows therapy bicycles to be ridden in hilly terrain, too. Shifting is accomplished via handlebar mounted click lever. Coaster brake for safe stops.

# **3-speed freewheel hub, with backwards drive possibility** (coaster brake)

Modification of the coaster brake allows the possibility to drive backwards.

### 3-speed H3130 freewheel hub with integral drum brake

Freewheel action allows back-pedaling without encountering resistance. Rider can thus easily turn cranks into the most suitable position before starting to pedal. Drum brake, integrated into rear hub is activated via handlebar-mounted lever.

### 5-speed freewheel hub with coaster brake

This 5-speed hub offers the rider a wide gearing range. Precision index grip shift lever allows shifting even while stationary. Hub is a sealed, maintenance-free system with coaster brake.

### 5-speed H5220 freewheel hub with integral drum brake

Same as for 3-speed freewheel hub, except that it offers the additional advantages of 5 speeds.

### 7-speed freewheel hub with coaster brake

Precision index grip shift lever allows shifting even while stationary.

Hub is a sealed, maintenance-free system with coaster brake.

# 7-speed H7220 freewheel hub with integral drum brake

Same as for 5-speed freewheel hub, except that it offers the additional advantages of 7 speeds.

### 5–speed electric motor drive

- The sensor controlled drive makes safer starting possible
- and more comfortable uphill rides. The electric motor 5-
- speed hub drive with sensor control improves the quality of
- the ride. Most jurisdictions do not require a license for this

T

- trend-setting propulsion system.
- (Please see additionaly pages 30 31)



Therapy Bicycle 16" ALU with accessory: 3-speed freewheel hub with coaster brake.

### HAVERICH-THERAPY-BICYCLE 16"

### **HMV:** 22.51.01.0002 **Dimensions:**

Minimum distance from seat top to pedal (in bottom position): 43 cm (17"), upward infinitely adjustable. Overall width: 65 cm (25,5") Overall length: 120 cm (47") Weight limit: 50 kg (110 lbs) Wheel size: 47–305 (16 x 1,75 x 2) **Standard equipment:** 

Freewheel hub with coaster brake, dual front caliper and drum brake, parking brake lever, lights, stabilizers with telescopic suspension.



Therapy Bicycle 16" base model.



### Therapy Bicycle 20" Size I ALU with accessory: 3-speed freewheel hub with coaster brake.



Therapy Bicycle 20" Size I base model

# HAVERICH-THERAPY-BICYCLE 20" Size I

HMV: 22.51.01.0003 Dimensions:

Minimum distance from seat top to pedal (in bottom position): 50 cm (20"), upward infinitely adjustable.

**Overall width:** 68 cm (26,5") **Overall length:** 140 cm (55") **Weight limit:** 60 kg (132 lbs) **Wheel size:** 47–406 (20 x 1,75 x 2) **Standard equipment:** 

Folding frame, freewheel hub with coaster brake, dual front caliper and drum brake, parking brake lever, lights, stabilizers with telescopic suspension.



### HAVERICH-THERAPY-BICYCLE 20" Size II

# **HMV:** 22.51.01.0003 **Dimensions:**

Minimum distance from seat top to pedal (in bottom position): 60 cm (24"), upward infinitely adjustable.

Overall width: 68 cm (26,5") Overall length: 150 cm (59") Weight limit: 75 kg (165 lbs) Wheel size: 47–406 (20 x 1,75 x 2) Standard equipment:

Folding frame, freewheel hub with coaster brake, dual front caliper and drum brake, parking brake lever, lights, stabilizers with telescopic suspension and Gel seat.



Therapy Bicycle 20" Size II with accessory: 3-speed freewheel hub with coaster brake



Therapy Bicycle 20" Size II TE low entry frame with accessory: 3-speed freewheel hub with coaster brake



### HAVERICH-THERAPY-BICYCLE 20" Size III

### **HMV:** 22.51.01.0003 **Dimensions:**

Minimum distance from seat top to pedal (in bottom position): 70 cm (27,5"), upward infinitely adjustable.

**Overall width:** 68 cm (26,5") Overall length: 155 cm (61") Weight limit: 90 kg (198 lbs) Wheel size: 47–406 (20 x 1,75 x 2) **Standard equipment:** Folding frame, freewheel hub with coaster brake, dual front caliper and

drum brake, parking brake lever, lights, stabilizers with telescopic suspension, Gel seat.



### Therapy Bicycle 20" Size III with accessory: 3-speed freewheel hub with coaster brake



Therapy Bicycle 20" Size III TE, low entry frame with accessory: 3-speed freewheel hub with coaster brake

### HAVERICH-THERAPY-BICYCLE 24"

# **HMV:** 22.51.01.0004 **Dimensions:**

Minimum distance from seat top to pedal (in bottom position): 72 cm (28"), upward infinitely adjustable.

Overall width: 70 cm (27,5") Overall length: 170 cm (67") Weight limit: 100 kg (220 lbs) Wheel size: 47–507 (24 x 1,75 x 2) Standard equipment:

Folding frame, freewheel hub with coaster brake, dual front caliper and drum brake, parking brake lever, lights, stabilizers with telescopic suspension and Gel seat.



Therapy Bicycle 24" with accessory: 3-speed freewheel hub with coaster brake

### HAVERICH-THERAPY-BICYCLE 24" TE

### **HMV:** 22.51.01.0004

Dimensions: Minimum distance from seat top to pedal (in bottom position): 72 cm (28"), upward infinitely adjustable. Overall width: 70 cm (27,5") Overall length: 170 cm (67") Weight limit: 100 kg (220 lbs) Wheel size: 47–507 (24 x 1,75 x 2) Standard equipment: Low entry frame, freewheel hub with

coaster brake, dual front caliper and drum brake, parking brake lever, lights, stabilizers with telescopic suspension and Gel seat.



Therapy Bicycle 24" TE low entry frame with accessory: 3-speed freewheel hub with coaster brake

ADAC MODUL



# HAVERICH-THERAPY-BICYCLE 26"

# **HMV:** 22.15.01.0005 **Dimensions:**

Minimum distance from seat top to pedal (in bottom position): 78 cm (31"), upward infinitely adjustable. **Overall width:** 67 cm (26) **Overall length:** 180 cm (71") **Weight limit:** 110 kg (250 lbs) **Wheel size:** 47–559 (26 x 1,75 x 2) **Standard equipment:** 3-speed freewheel hub with coaster brake, dual front caliper and drum brake, parking brake lever, ights, stabilizers with telescopic

suspension and Gel seat.



Colors: See color chart page 32

### Therapy Bicycle 26" base model.

HAVERICH-THERAPY-BICYCLE 26" TE **HMV:** 22.15.01.0005 **Dimensions:** Minimum distance from seat top to pedal (in bottom position): 78 cm (31"), upward infinitely adjustable. Overall width: 67 cm (26") **Overall length:** 185 cm (71") Weight limit: 110 kg (250 lbs) Wheel size: 47–559 (26 x 1,75 x 2) **Standard equipment:** ADAC MODUL+ Low entry frame, 3-speed freewheel hub with coaster brake, dual front caliper and drum brake, parking brake lever, lights, stabilizers with telescopic suspension and Gel seat. See color chart page 32

Therapy Bicycle 26" TE low entry frame base model.

Relaxed riding, up and down hill, is now possible with our new bicycle with telescopic suspension and electronic supported propulsion system that is controlled by pedal pressure. The high performance motor can be switched on, depending upon need, in two booster options.

A button on the control unit, installed on the handlebar, can change between the fast speed or the Econ mode for extended range of travel.

The range of 15 to 30 kilometers depends on different factors such as terrain, weight of rider and the pedaling contribution of the rider.

Many jurisdictions do not require a special license for this trentsetting propulsion.

ADAC MODU

### HAVERICH-THERAPY-BICYCLE 20" Size III E-Bike

# **HMV:** 22.51.01.0003 **Dimensions:**

Minimum distance from seat top to pedal (in bottom position): 70 cm (27,5"), upward infinitely adjustable.

Overall width: 68 cm (26,5") Overall length: 155 cm (61") Weight limit: 90 kg (198 lbs) Wheel size:

### 47–406 (20 x 1,75 x 2) **Standard equipment:**

Low entry fame, 5-speed electric motor freewheel hub, rear calipper brake, dual front caliper and drum brake, parking brake lever, lights, stabilizers with telescopic suspension and Gel seat.



**Colors:** See color chart page 32

Therapy Bicycle 20" Size III E-Bike, low entry frame base model



Therapy Bicycle 24" E-Bike, low entry frame base model



Therapy Bicycle 26" E-Bike, low entry frame base model

The extensive color palette for HAVERICH special cycles ranges from today's trendy colors to colors of conservative elegance. A successful color selection for each taste and each age group is possible. Beyond the standard lacquer finishes, presented here, Custom colors are available, with a surcharge. If interested, please contact us for additional information.

1001 <b>metalic blue</b>
1002 <b>metalic red</b>
1013 <b>metalic violet</b>
1005 ocean blue
1004 <b>red</b>
1010 <b>hunter green</b>
1008 <b>green</b>
1009 <b>purple</b>
1017 silver / ocean blue
1007 <b>yellow / green</b>
1012 yellow / red
1011 black / violet
1014 <b>purple / violet</b>

For technical reasons, paint colors shown, approximate actual colors.

These exclusive HAVERICH accessories are specifically designed for the individual model and ensure, with correct application, the highest functionality.

One of the most significant advantages of the HAVERICH cycles is their modular construction. Each cycle can be easily modified with additional accessories, selected from a wide range of specialized equipment.

The table on pages 40 - 43 gives an overview of the combination options available for the basic model. Choices of drive train and adaptive accessories are available.

Modular construction offers the possibility to add additional adaptive accessories, as technical improvements are developed, without the need to purchase a new cycle.

The decision to purchase a HAVERICH specialized cycle is economically sound whether it to be used as a therapeutic tool or for every day mobility.

Useful accessories increase the motivation and security of challenged cyclists in both therapy and road cycling.



215 **Safety Helmet** blue Small (48-52) 216 **Safety Helmet** red Small (48-52)



225 **Safety Helmet** blue Large (52-56) 226 **Safety Helmet** red Large (52-56)



074 **Gel Seat** Flexible material, conforms to anatomical contours



077 Banana Seat



095 **Relax saddle** Anatomically shaped crossbar saddle. For patients with problems in the Perineum.



174 **Gel Seat** (small) Anatomical shaped child seat



085 **Women's seat** without pommel, gel foam for comfortable seating



034 **Mofa-Seat** (Denfeld) Comfortable seat with rocker spring



035 **Moped-Seat** For persons with broad hips



084 **Coil Spring Seat Post** Reduces impact to spinal column (adds 4" to post height)



048 **T-Seat Post** Adjust horizontal position relative to handlebar



086 **Vario-Backrest** Small backrest with belt, adjusts in all directions



065 Leg Harness



019 Standard Backrest with leather strap



020 **Standard Backrest with padded strap** Keeps torso upright.



017 **Wraparound Backrest with** padded strap Stabilizes torso of individuals with spasticity or scoliosis



039 **Shoulder Harness** requires 017 backrest



021 **Hip Pads** Vertically and horizontally adjustable, requires 017 backrest



060 **Home Training Pedal** With balancing weight



011 **Pedal with Toe clip** Prevents foot from slipping from pedal



005 **Treadle Crank** Left 006 **Treadle Crank** Right Adjustable stroke crank



025 **Crank Shorteners** Reduces pedal-seat distance, offsets uneven leg



013 **Footrest with Leather Straps** For securing foot to pedal



113 **Footrest with Velcro Strap** To secure foot to pedal.



010 **Footrest with Leg Guide and Leather Strap** Positions and retains foot and lower leg. Well padded calf support. Hight of Leg Guide adjustable.



110 Footrest with Leg Guide Velcro Strap

Positions and retains foot and lower leg. Well padded calf support. Hight of Leg Guide adjustable.



014 **Fixed Footrest** Left 015 **Fixed Footrest** Right For individuals with rigid leg or fixed knee joint



120 **PFS** Complex system for complete reciprocal motion therapy



040 **Cane Holder** (1 Cane) 042 **Cane Holder** (2 Canes)



007 **Turn Signal Indicator** (with charger)



098 **Steering Damper** This accessory improves the handling of all cycles



099 Steering Angle limiter



038 Guide Rod



238 **Guide Rod with Brake** Allows caregiver to control brake



002 **Arm Supports** Positions and retains lower arm



056 **Auxiliary Handlebar** Provides equal distance from body to handlebar regardless of steering angle.



050 **Vertical Bar Ends** Ideal accessory for individuals with grip problems



093 **Multiposition handlebar** The end and the middle section are adjustable separately which allows excellent adjustments for the individual sitting position. Thus also asymmetric adjustments are possible.



089 **Vario handlebar** These handlebars allow a multitude of adjustments. Asymmetric adjustments are also possible.



090 **Bullhorn handlebar** The straightforward construction of these handlebars leads to a stretched position of the arms and makes a horizontal or vertical handle position possible.



091 **Trekking handlebar** The straightforward construction of these handlebars leads to a stretched position of the arms without an angulation of the wrists.



079 **Support Glove** Secures hand to handlebar



192 Mountain Bike Tire



036 Rear View Mirror



043 **Cycle Computer** With 5 Functions



030 **Halogen Headlight** Increases brightness and improves visibility



032 Headlight with Battery Backup Light stays on during stops



024 **Basket** Small basket attaches to luggage rack



061 **Large Basket** Attached to frame, low set, measures 21"x 8"x 14"



083 **Covered Luggage Carrier** Large, hard carrier with reflector. Offer more security



150 **Stabilizers** Fits bicycles with wheels sized: 16", 18", 20", 22", 24", 26", 28" For riders with slight balance problems.



100 **Cover** 



600 **Rear Carrier** Non rusting, light alloy carrier is suitable for larger tricycles. An adapter offers additional space a bicycle.

# Now you should have a better understanding of the equipment available to select an optimally equipped cycle to meet your needs.

This catalog presents our complete product line so that you may make the correct cycle selection to meet you needs. Cycle selection, based on cycle size, drive combinations and adaptive equipment can be made by referencing the tables on the following four pages. If you have specific questions, please call a local dealer or our customer support line for assistance. Demonstrations made be arranged at our facility or at local distributors, by appointment.

Many insurance plans offer reimbursement for our cycles when proper documentation of medical necessity is provided. Our cycles have been submitted to the FDA and are listed as class 1 medical devices. Should you require a detailed quotation, please submit a written request or call our toll-free number for assistance. You physician may provide a "letter of medical necessity" and it is best supported by a letter from your physical therapist. Often tandem cycles and sports cycles are not eligible for reimbursement but their purchase may be assisted by charitable organizations. Please contact us for more information. The table on page 5 will be a great help in determining the proper frame size and drive selection. The following tables will provide an overview of the possible combination of accessories. The form on page 5 will provide use with sufficient information about the prospective user so that we may provide a detailed offer.

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Cycle Computer 5 functions       I
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Auxillary HandlebarImage: set
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Basket - Large (low-mounted)II </td
Leg HarnessImage: Second s
Front Hydraulic BrakeII
Gel SeatImage: Seat of the state
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Covered Luggage CarrierCovered Luggag
Coil Spring Seat PostII
Women's seat
Vario backrest       ···
Vario handlebar       •
Trekking handlebar • • • • • • • • • • • • • • • • • • •
Multiposition handlebar
Relax saddle
Steering Dumper         •
PFS with Foot Rest, leather strap
PFS with Foot Rest, Velcro Strap
Gel Seat (small)
MTB Tire • • • • • • • • • • • • • • • • • • •
Guide Rod with Hand Brake
Manual Drive with Foot Platforms BA
Manual Drive Train, Rigid       Image: Constraint of the state of the
Manual Drive, 3 speed Freewheel

● = Optional	The	rapy E	Bicycle	es									Therc with e	a <b>py Bi</b> lectric n	cycles notor	Tand Bicycle	ems es		<b>Tand</b> Tricycl		
<ul> <li>= Optional, no extra cost</li> <li>S = Standard Version</li> </ul>	16"	16" ALU	20″ I	20″ I Alu	20″ II	20″ II TE	20″ III	20″ III Te	24″	24" TE	26"	26" TE	20″ III E-BIKE		26" E-BIKE	20″ MK	20" EW	26"	20″ MK	20" EW	26″
Drive options											1	1	1	1	1					1	1
001         Rigid drive train           082         Change-over for rigid/freewheel gear						-															
044 Freewheel hub with coaster brake	S	S	S	S	S	S	S	S	S	S											
<b>046</b> 3 speed freewheel with coaster brake	•	•	•	•	•	•	•	•	•	•	S	S				S	S	S	S	S	S
070 3 speed freewheel backwards drive possibility	•	•	•	•	٠	•	•	٠	•	•	٠	•									
<b>047</b> 3 speed freewheel with drum brake	•	•	•	•	٠	•	•	٠	•	•	•	•					-				
<ul><li>064 5 speed freewheel with coaster brake</li><li>071 5 speed freewheel backwards drive possibility</li></ul>				•		•	•	•	•	•	•	•				•	•	•	•	•	•
<ul><li>067 5 speed freewheel with drum brake</li></ul>			•	•	•	•	•	•	•	•	•	•	S	S	S						
<b>068</b> 7 speed freewheel with coaster brake			•	•	•	•	•	•	•	•	•	•									
069 7 speed freewheel with drum brake			•	•	•	•	•	٠	٠	•	٠	٠									
080 21 speed, rear wheel hydraulic disc brake																					
078 Altern.: Grip shift for all freewheelhubs																					
065 Differential gear	_	_	_	_	_	_	-	_											S	S	S
055       24 tooth rear hub         081       Freewheel Crank set, rear position																•	•		•	•	•
Accessories		I	I	I	I	1	1	I	l 	l 	1	I	1	l 	I	-	-	-		-	
002 Arm Supports	pr.																•			•	
005 Treadle Crank, left	•	•	•	•	•	•	•	٠	•	•	•	•									
006 Treadle Crank, right	•	•	•	•	•	•	•	•	•	•	•	•									
007 Directional Indicator		•	•	•	•		•	•	•	•	•	•	•	•	•	-	-	-	-	-	
010 Foot Rest and Leg Guide	pr.															•	•		•	•	
<ul><li>110 Foot Rest with Leg Guide, Velcro Strap</li><li>011 Pedal with Toe Clip</li></ul>	pr.																				
013 Foot Rest with Balancing Weight	pr. •	•					•	•	•	•	•					•	•		•	•	
113 Foot Rest with Leg Guide, Velcro Strap	pr.	•	•	•	•	•	•	•	•	•	•	•				•	•	•	•	•	•
014 Fixed Foot Rest, left	•	•	•	•	•	•	•	•	•	•	•	•									
015 Fixed Foot Rest, right	•	•	•	•	•	•	•	•	•	•	•	•									
016 Wraparound Backrest without Belt																			•	•	•
017 Wraparound Backrest with Padded Strap																			•	•	•
<ul><li>018 Standard Backrest without Strap</li><li>019 Standard Backrest with Strap</li></ul>																			•	•	
020 Standard Backrest with Padded Strap																					
021 Hip Pads (requires 017 backrest)	pr.																		•	•	•
024 Basket	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
025 Crank Shortener	pr.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
030 Lights	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
032 Lights with Backup Battery	•		•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
094 Lights with Hub Dynamo				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
034 Light Moped Seat (Denfeld) 035 Moped Seat	•	•														•					
036 Rear-View Mirror	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
038 Guide Rod	•	•	•	•	•	•	•	•	-	-				-			-		-	-	
039 Shoulder Straps	pr.																		•	•	•
040 Cane Holder (1 Cane)	•	•	•	●	●		•	•	•	•	•	•	•	●	•	•	●	●	●	●	•
041 Cane Holder (2 Canes)	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<ul><li>043 Cycle Computer 5 functions</li><li>048 T-shaped Seat Post</li></ul>	•						•			•			S	S	S	•	•		•		
048 I-shaped Seat Post 050 Vertical Handlebar Grip	-	•		•	-		-	•	-	•		-		•							
056 Auxillary handlebar	pr.		•	•	•	•	•	•	•	•		•				•	•	•	•	•	•
060 Home Training Pedals	pr. •		•	•	•	•	•	•	•	•	•	•	•	•	•		•		•	•	•
062 Leg Harness																•	•	•	•	•	
072 Front Hydraulic Brake	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•						
074 Gel Seat	•	•	•	•	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
079 Support Glove															5	•	•				•
084 Coil Spring Seat Post 085 Women's seat														•	3						
086 Vario backrest																					
089 Vario handlebar	•		•	•	•			•		•	•	•									
090 Bullhorn handlebar								•			•										
091 Trekking handlebar	•	•	•	•	•		•	•	•	•	•	•									
093 Multiposition handlebar							•	•	•	•	•	•	•	•	•						
095 Relax saddle													• c	•	• c				-		
<ul><li>098 Steering Dumper</li><li>099 Steering Angle Limiter</li></ul>											•		S	S	S	•	•	•			
VII Steering Angle Linner																					
120 PFS with Foot Rest, leather stran																					
<ul><li>120 PFS with Foot Rest, leather strap</li><li>123 PFS with Foot Rest, Velcro Strap</li></ul>			1	1	1	1	1	1	1	1		1	1							1	
<ul> <li>PFS with Foot Rest, leather strap</li> <li>PFS with Foot Rest, Velcro Strap</li> <li>Gel Seat (small)</li> </ul>	•	•																			
<ul> <li>PFS with Foot Rest, Velcro Strap</li> <li>Gel Seat (small)</li> <li>MTB Tire</li> </ul>	•	•	•	•	•	•	•	•	•	•	•	•				S	S		S	S	S
<ul><li>123 PFS with Foot Rest, Velcro Strap</li><li>174 Gel Seat (small)</li></ul>	•	•	_	•	•	•	•	•	•	•	•	•				S	S		S	S	S