

**2012** CATALOG



**LEADING SUPPLIER** OF

TIRE MANAGEMENT & INFLATION SOLUTIONS



HALTEC STOCKS VALVES FOR ALL
APPLICATIONS: AUTOMOTIVE, TRUCK,
BUS, AGRICULTURAL, AND OFF-ROAD.







HALTEC CORPORATION USES NUMEROUS
STATE-OF-THE-ART AUTOMATIC CNC
TURNING MACHINES DURING OUR
MANUFACTURING PROCESS.





HALTEC HAS BEEN REGISTERED AS AN ISO CERTIFIED COMPANY SINCE 1998.

OUR MANUFACTURING, QUALITY AND INSPECTION PROCESSES ARE ASSESSED BY AN INDEPENDENT CERTIFICATION BOARD EVERY SIX MONTHS.

#### ☐ TIRE VALVE SYSTEMS & TECHNOLOGY FOR THE WORLD

For over 40 years, Haltec Corporation has been the leader in the tire valve industry. When underground mines were transitioning from rail wheels to rubber tires, Haltec was there to design and manufacture the tire valve systems required to meet their technical needs.

Haltec maintains its leadership position as a major manufacturer of specialized tire valve systems. Many new product innovations were introduced by Haltec, including the Full-Flo and Super Large Bore valve designs. These designs provided the tire industry the unique products required to achieve faster flow rates, decreased downtime, and more efficient tire management. The

ever-increasing size of mining and construction tires further challenged Haltec engineering to design and manufacture our wide variety of valve systems to meet these demands. This includes the Mega Bore Tire Valve System, which has a flow rate twenty-five times faster than large bore valves.

Today, Haltec Corporation is recognized worldwide as the leading manufacturer of specialty tire valve systems and pressure inflation hardware. Haltec's 45,000 square foot facility in Salem, Ohio maintains its corporate headquarters, manufacturing, design, engineering and distribution services. As an ISO 9001/2008, with design certified company, Haltec Corporation's

Quality Policy is to lead the tire valve industry by meeting or exceeding industry standards and customer requirements at a competitive price. Our on-site engineering and custom design department is complemented with a state-of-the-art machine shop and soldering, fabrication, custom-bending and product assembly services, all prepared to produce products to meet your inflation and pressure maintenance needs. Haltec has refined a global network of distribution channels and continues to grow sales to its target markets.

We hope you will find this catalog easy to use and informative. We have included "Tech Tips" throughout the text, providing information on proper inflation and our products. You will also find many product innovations, like our ES-300 series airchuck. If you can't find what you need while reviewing our catalog, please

contact our Customer Service and Sales Team so we can begin engineering the solution to your tire management program.

Haltec Corporation's products and services are designed to provide safe, efficient, and accurate tire inflation. Our goal is to provide the tire industry with the equipment and training required to enhance any organization's "Tire Management Program." Whether using air or nitrogen, the tire's PSI and tread depth need to be accurate, and the method of inflation must be safe, simple, and fast.

For us, "PSI" translates to more than just one part of your inflation needs; it means "Proactive Solutions & Innovation." When it comes to quality, we don't limit ourselves at Haltec, and neither should you - that's our "Haltec Complete Solution - Haltec's PSI Promise."

#### HOW TO USE THIS INTERACTIVE CATALOG:









HALTEC CORPORATION USES NUMEROUS STATE-OF-THE-ART AUTOMATIC CNC
TURNING MACHINES DURING OUR MANUFACTURING PROCESS.

#### ☐ TIRE VALVE SYSTEMS & TECHNOLOGY FOR THE WORLD

For over 40 years, Haltec Corporation has been the leader in the tire valve industry. When underground mines were transitioning from rail wheels to rubber tires, Haltec was there to design and manufacture the tire valve systems required to meet their technical needs.

Haltec maintains its leadership position as a major manufacturer of specialized tire valve systems. Many new product innovations were introduced by Haltec, including the Full-Flo and Super Large Bore valve designs. These designs provided the tire industry the unique products required to achieve faster flow rates, decreased downtime, and more efficient tire management. The

ever-increasing size of mining and construction tires further challenged Haltec engineering to design and manufacture our wide variety of valve systems to meet these demands. This includes the Mega Bore Tire Valve System, which has a flow rate twenty-five times faster than large bore valves.

Today, Haltec Corporation is recognized worldwide as the leading manufacturer of specialty tire valve systems and pressure inflation hardware. Haltec's 45,000 square foot facility in Salem, Ohio maintains its corporate headquarters, manufacturing, design, engineering and distribution services. As an ISO 9001/2008, with design certified company, Haltec Corporation's

HALTEC STOCKS VALVES FOR ALL APPLICATIONS: AUTOMOTIVE, TRUCK, BUS, AGRICULTURAL, AND OFF-ROAD.





HALTEC HAS BEEN REGISTERED AS AN ISO CERTIFIED COMPANY SINCE 1998. OUR MANU-FACTURING, QUALITY AND INSPECTION PROCESSES ARE ASSESSED BY AN INDEPENDENT CER-TIFICATION BOARD EVERY SIX MONTHS.

Quality Policy is to lead the tire valve industry by meeting or exceeding industry standards and customer requirements at a competitive price. Our on-site engineering and custom design department is complemented with a state-of-the-art machine shop and soldering, fabrication, custom-bending and product assembly services, all prepared to produce products to meet your inflation and pressure maintenance needs. Haltec has refined a global network of distribution channels and continues to grow sales to its target markets.

We hope you will find this catalog easy to use and informative. We have included "Tech Tips" throughout the text, providing information on proper inflation and our products. You will also find many product innovations, like our ES-300 series airchuck. If you can't find what you need while reviewing our catalog, please contact our Customer Service and Sales Team so we can begin engineering the solution to your tire management program.

Haltec Corporation's products and services are designed to provide safe, efficient, and accurate tire inflation. Our goal is to provide the tire industry with the equipment and training required to enhance any organization's "Tire Management Program." Whether using air or nitrogen, the tire's PSI and tread depth need to be accurate, and the method of inflation must be safe, simple, and fast.

For us, "PSI" translates to more than just one part of your inflation needs; it means "Proactive Solutions & Innovation." When it comes to quality, we don't limit ourselves at Haltec, and neither should you - that's our "Haltec Complete Solution - Haltec's PSI Promise."

### ☐ TABLE OF CONTENTS

Mining Solutions	6-7
Commercial Fleet Solutions	8-9
Passenger & Light Truck Solutions	10-11
Large Bore Valve Systems	12-19
PT Valve Systems	20-21
Super Large Bore Valve Systems	22-29
Z-Bore Valve Systems	30-33
Mega Bore Valve Systems	34-38
O-Rings & L-Rings	39
Standard Bore Valves	40-44
Valve Extensions.	45-46
Special Applications	47
Air/Liquid Valves	48
Liquid Fill	49
Valve Cores, Caps, Adapters.	50
Grommets, Hexnuts, Washers	51
Tank Valves And Bead Seaters.	52
Service Gauges	53-54
Digital & Dial Gauges	55
Gauges, Tread Depth Gauges	56
Large Bore Tools	57
Large Bore Air Chucks	58
Standard Bore Air Chucks	59-61
Standard Bore Valve Tools.	62-63
Tire Management Solutions	64-65
Inflator Systems	66-81
Couplers & Nipples	82-83
Alcoa	84-87
Hydraulic Jacks, Equipment	88-89
Ken-Tool	90-93
Goodyear	94
Rusch	95

#### TIRE VALVE SYSTEMS

#### ☐ BACKGROUND

The Super Large Bore System was introduced in 1972 and was designed to allow significantly greater air flow than the Large Bore Valve which was introduced much earlier. Today, vehicle and tire sizes are increasing again. In response to the increases in tire size, Haltec has introduced two new tire valve systems to make inflation and deflation of large tires easier and guicker than ever before: Z-Bore and Mega Bore.

#### ☐ SYSTEM COMPARISONS

The chart below demonstrates the general characteristics of the four valve systems:

VALVE SYSTEM	FLOW RATE (CFM)	FITS VALVE HOLE	HOLE SIZE THREADED	SPECIAL INFLATOR NEEDED	RECOMMENDED FOR TIRE SIZES
LARGE BORE	22*	13/16"	1/2" NPT	-	11.25" - 29"
SUPER LARGE BORE	240	13/16"	1/2" NPT	IN-80A/IN-95	20" up to 57"
Z-BORE	370	13/16"	1/2" NPT	Z-12/IN-95	33" up to 57"
MEGA BORE	550	15/16"	3/4" NPT	MB-8/IN-95	45" up to 63"

<sup>\*</sup> Flow Rate is without valve core installed. With core, flow rate is 12 CFM. Flow rates on the Super Large Bore, Z-Bore, and Mega Bore Valves were tested with a 750 CFM diesel-powered air compressor with the pressure held constant at 100 PSI.

#### ☐ FLOW DIAMETERS:

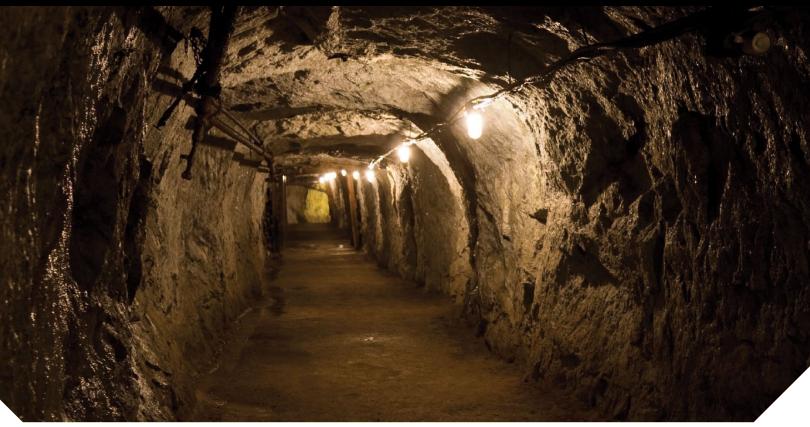
Shown below is a cross-section of the different flow diameters on the four valve systems. How these increased air flows are accomplished, often using the same rim hole size, will be explained in further detail in this catalog:



INCREASED FLOW RATE SAVES INFLATION TIME. SUPER LARGE BORE INFLATION RATE IS MORE THAN THREE TIMES FASTER THAN LARGE BORE.



# MINING SOLUTIONS



Haltec manufactures over 30 different automatic tire inflators for purposes of general inflation.

#### **Mining Solutions:**

As a manufacturer of specialized tire valve systems and pressure inflation solutions, Haltec Corporation has been the unchallenged leader in off-highway, mining, and construction tire management solutions and components for nearly 40 years. Unique innovations designed to minimize downtime have led to the development of superior quality, precisely engineered valve systems that fill every heavy equipment need.

Haltec offers a full range of products beginning with Large Bore flow diameters, and increasing to removable core Super Large Bore, Z-Bore, and Mega Bore valves that top the inflation and deflation charts at an unbelievable 550 CFM. That's 25 times the flow rate of a large bore valve, and these valve systems are installed in most cases without increasing the original rim hole size. Also, when paired with one of our extensive line of rugged and reliable inflators, such as our 89XTC temperature compensating model, it is clear that Haltec does not stop at manufacturing just the highest quality individual components, but also offers completely designed and engineered solutions to real world challenges.

## MINING SOLUTIONS

#### **AUTOMATIC TIRE INFLATORS**

89XTC-Temperature Compensating Tire inflator, designed to work with an in-line temperature sensor and is engineered specially for inflating larger industrial and mining tires which are often constantly in service and always running hot.

89XTC - TEMPERATURE COMPENSATING INFLATOR PAGE 67





#### **TIRE VALVES**

R-520 is designated at Tire and Rim as the CH-8. It is an integral part of the system as the CH-8 is removed from the valve assembly with the Haltec IN-80A adapter to utilize the larger opening and the fullest air flow.

R-520 - SUPER LARGE BORE CORE HOUSING PAGE 24



#### **INFLATOR**

I-495-15 is the IN-95 inflator with 15' hose. Safely removes operator away from the blast zone by using the 15' hose. Equipped with shut off ball valve which enables operator to stop inflation for proper tire inspection.

I-495-15 - IN-95 INFLATOR WITH 15' HOSE PAGE 81





# COMMERCIAL FLEET SOLUTIONS





#### **Commercial Fleet Solutions:**

The need to manage a tire and rim as an asset rather than an expense is the concern of every commercial fleet manager. The trick is to find a company that can provide the combination of quality tire valve hardware and inflation equipment that can competitively and consistently provide that service.

Haltec Corporation provides a complete tire valve and inflation program designed specifically for the unique needs of each fleet. Combining the TV-550 series valve with a DS-1 flow-through valve cap provides a better grommet seal for the valve and an efficient way to check and correct the PSI.

When an 89XHB or 89MTIS is used in the mounting and speed lane to inflate and top-off pressure, the accuracy and efficiency of your tire management program grows. Haltec can further enhance the "fleet check" process with our web-based and Bluetooth enabled Tire Management System. Haltec can create a "Tire Inflation Solution" for any size fleet, as the Haltec Tire Management program combines custom software with Bluetooth enabled tire inflation and tread depth tools.

## **COMMERCIAL FLEET SOLUTIONS**

#### **AUTOMATIC TIRE INFLATORS**

Haltec automatic inflators provide a precision tool to maintain properly inflated tires with high speed and accuracy. The custom manufactured 89MTIS Series inflates 1-5 wheels simultaneously with 0.3PSI accuracy. Accurate PSI needs to be the primary objective of every tire inflation/service program. The PSI in the tire needs to be accurate and the method of inflation must be simple and fast.

#### 89MTIS-3 - MOBILE MULTIPLE TIRE INFLATION SYSTEM PAGE 69



Straight clamp-in valves used on both demountable and non-demountable rims. For .625" diameter valve hole. Bent valve stems also available.

#### TV-500 - STRAIGHT CLAMP-IN VALVE PAGE 41

The DS-1 flow-through valve cap is designed for high pressure truck tire service. Seals like a high pressure valve cap, yet offers the convenience of an inflate through extension.

DS-1 - DOUBLE SEAL CAP PAGE 46

#### **GAUGES AND AIR CHUCKS**

Haltec's "Easy lock" air chucks provide an easy on/off application with an automatic locking-designed chuck. The 89MTIS-3CHKIT offers a variety of angled chucks to service your fleets need.

ES-300 SERIES CHUCKS PAGE 74







TV-500



DS-I



89MTIS-3CHKIT

#### MANAGEMENT SOFTWARE

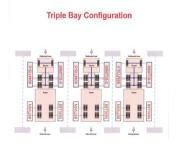
TYRECHECK combines tire inspection hardware with web-based software to provide small and large commercial fleets the most efficient way to collect and manage tire inspection data.

TYRECHECK PAGE 64

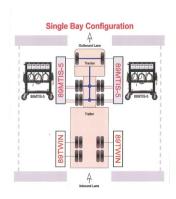


**TYRECHECK** 

#### SHOP DESIGN/PRODUCT INTEGRATION SERVICES

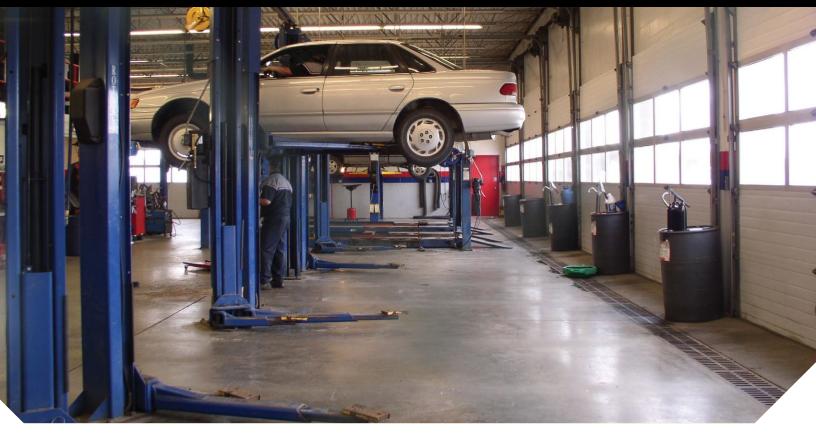








# PASSENGER AND LIGHT TRUCK SOLUTIONS



#### Passenger & Light Truck Solutions:

Haltec Supplies distributors and dealer networks with the products needed to service all makes and models of passenger and light trucks. Our diverse product offering includes the premier solution for management of TPMS systems: Alligator's sens.it. Our automatic tire inflators provide accurate inflation ensuring the safety and comfort of the tire professional's customers.

# PASSENGER AND LIGHT TRUCK SOLUTIONS

#### **AUTOMATIC TIRE INFLATORS**

Haltec's most popular single tire inflation system. The perfect inflation solution for any quick lube, auto dealer or tire service center. Quick, efficient, and accurate PSI.

89MXA / 89XDA - AUTOMATIC INFLATORS PAGE 67





89MXA / 89XDA

#### **AIR CHUCKS**

This chuck features the popular European-style clip with a brass 1/4" female fitting. Compact, durable and easy to use, this chuck is available either closed (CH-360) or open (CH-360-OP). Uses replacement washer 10140.

CH-360OP-1 - CLIP-ON AIR CHUCK PAGE 59



CH-360OP-1

#### **INFLATION HOSE**

24' hose used with the 89MXA and 89XDA equipped with CH-360OP brass lock-on chuck.

89HKC-24 - 24' STRAIGHT HOSE W/COUPLER & CH-360OP AIR CHUCK PAGE 76



#### MANAGEMENT SOFTWARE

Haltec has incorporated Alligator sens.it. TPMS valves into its tire technology management system to provide reliable and accurate tire

- Best vehicle coverage in the industry, with both the 315 mhz and 434 mhz sensor.
  Alligator sensors offer a significant reduction in inventory complexity and cost as well as reduced service cycle time and cost
- Features web-based programming and connection capability (via USB port) and a self-updating system for new protocols

590900 - TPMS ALLIGATOR SENS.IT PAGE 74









#### **COMPONENTS OF THE HALTEC LARGE BORE SYSTEM**

The Large Bore Valve System is the oldest of the four off-road tire valve systems. Below are the basic components of a Large Bore Valve System.

- 1 There are two basic spud designs:
  - a. The standard clamp-in spud (H-41)
  - b. The screw-in spud (C-10)
- Into one of these spuds you screw a Large Bore Swivel Valve. While all Large Bore Valves vary in bend, length, and appearance, they all have a swivel feature. An O-ring seals into the valve spud and is tightened down with a swivel nut.
- 3 To service the inside dual there are three types of extensions offered:
  - a. A rigid extension (867 Series)
  - b. A hand-bendable extension (753S Series)
  - c. A flexible extension (810F Series)

All Large Bore Valves can be serviced with any of the Large Bore air chucks, gauges, and tools found in the Haltec Catalog. As with all off-road valve systems, there are many customized products available. You will also find many customized bent extensions in use.



#### 1 RIM SPUDS

#### H-41 TUBELESS SPUD TR-SP-2

Fits 13/16" rim hole. Used with all Large Bore Swivel valves.

#### C-10 LARGE BORE SCREW-IN-SPUD TR-SP-3

Screws into a 1/2" NPT tapped hole in the rim. Can be replaced without dismounting tire.



**SWIVEL VALVES** 



#### LARGE BORE SWIVEL VALVES **SINGLE BEND SWIVEL VALVES**

HAITEC NO	TR NO	BEND	"L" HORIZ	Z. LENGTH	"H" VERTI	CAL HEIGH
HALIEC NO.	IKINO.	ANGLE	INCHES	MM	INCHES	MM
N-1418	-	74°	1 3/4	44.5	1 5/64	27.4
WH-300-J-650	J-650	80°	3 1/8	79.4	1 5/64	27.4
WH-300-J-653	J-653	80°	2 1/2	63.5	1 5/64	27.4
WH-300-J-657	J-657	80°	4	101.6	1 5/64	27.4
WH-300-4 1/2	-	80°	4 1/2	114.3	1 5/64	27.4
WH-300-J-658	J-658	80°	5 1/2	139.7	1 5/64	27.4
WH-300-9	-	80°	9	228.6	1 5/64	27.4
WH-44-6	-	strt.	6	152.4		
WH-45-2 1/2	J-4000-2 1/2	90°	2 1/2	63.5	1 5/64	27.4
WH-45-4	J-4000-4	90°	4	101.6	1 5/64	27.4
WH-45-4 1/2	J-4000-4 1/2	90°	4 1/2	114.3	1 5/64	27.4
WH-45-5	J-4000-5	90°	5	127	1 5/64	27.4
WH-45-6	J-4000-6	90°	6	152.4	1 5/64	27.4
WH-45-7 1/2	J-4000-7 1/2	90°	7 1/2	190.5	1 5/64	27.4
WH-45-8	J-4000-8	90°	8	203.2	1 5/64	27.4
WH-45-9	J-4000-9	90°	9	228.6	1 5/64	27.4
WH-45-10	J-4000-10	90°	10	254	1 5/64	27.4
WH-45-10 1/2	J-4000-10 1/2	90°	10 1/2	266.7	1 5/64	27.4
WH-45-12	J-4000-12	90°	12	304.8	1 5/64	27.4
WH-45-13	J-4000-13	90°	13	330.2	1 5/64	27.4
WH-45-24	J-4000-24	90°	24	609.6	1 5/64	27.4
WH-45-28	J-4000-28	90°	28	711.2	1 5/64	27.4
WH-45-29 1/2	J-4000-29 1/2	90°	29 1/2	749.3	1 5/64	27.4
WH-45-30	J-4000-30	90°	30	762	1 5/64	27.4
WH-45-32	J-4000-32	90°	32	812.8	1 5/64	27.4
WH-45-36	J-4000-36	90°	36	914.4	1 5/64	27.4
WH-46-J-651	J-651	90°	4 11/16	119	1 17/64	32.1
WH-46-4 1/2	-	90°	4 1/2	114.3	1 17/64	32.1
WH-46-9	-	90°	9	228.6	1 17/64	32.1
WH-47-J-652	J-652	86°	5 1/2	139.7	1 5/64	27.4
WH-47-4 1/2	J-032	86°	4 1/2	114.3	1 5/64	27.4
WH-47-9	_	86°	9	228.6	1 5/64	27.4
WH-48-J-655	J-655	74°	3 1/8	79.4	1 5/64	27.4
WH-49-J-654	J-654	60°	3 1/8	79.4	1 5/64	27.4
WH-50-J-659	J-659	90°	3 1/2	88.9	1 57/64	50.4
WH-50-J-660	J-660	90°	8 3/4	222.3	1 57/64	50.4
WH-50-6	-	90°	6	152.4	1 57/64	50.4
WH-50-7 1/2		90°	7 1/2	190.5	1 57/64	50.4
WH-51-J-668	J-668	90°	4 11/16	119	5 1/8	130.2
WH-52-2	3-000	90 25°	2	50.8	1 5/64	27.4
WH-52-2 WH-53-5 1/2	-	25 80°	5 1/2	139.7	1 21/64	33.8
WH-53-5 1/2 WH-54-6	-	90°	6	152.4	2 25/64	60.8
WH-55-2 1/2	-	90°	2 1/2	63.5	2 25/64	60.8
,	-					
WH-55-8 1/2 WH-56-3	-	90° 65°	8 1/2	216.2 76.2	2 25/64	60.8 27.4
	-		-	-	1 5/64	
WH-57-3 WH-58-2 1/2	-	80°	3 2 1/2	76.2 63.5	1 5/64 2 1/8	27.4 54

#### **TECH TIP**

ALL LARGE BORE SWIVEL VALVES CAN BE USED WITH EITHER OF THE RIM SPUDS FEATURED ON PAGE 12.



Any other lengths can be ordered. All valves equipped with core and hex cap On lengths over 6", 2 lock nuts are furnished





**SWIVEL VALVES** 

#### **TECH TIP**

THREAD SEALANT SHOULD ALWAYS BE USED ON PIPE THREADS. NINETY-FIVE PERCENT OF LARGE BORE VALVES USE 13/16" THREAD.



#### **DOUBLE BEND SWIVEL VALVES**

DOODLE DELIVE OV	*********************************					
HALTEC NO.	TR NO.	BEND ANGLE	HORIZONTAL INCHES	LENGTH MM	VERTICAL INCHES	HEIGHT MM
WH-70-J-661	J-661	82°-8°	4 1/2	114.3	1 5/64	27.4
WH-70-J-661-10 1/2	-	82°-8°	10 1/2	266.7	1 5/64	27.4
WH-70-J-661-25 1/2	-	82°-8°	25 1/2	647.7	1 5/64	27.4
WH-70-J-661-28	-	82°-8°	28	711.2	1 5/64	27.4
WH-70-J-664	J-664	90°-13°	8 3/4*	222.3	1 5/64	27.4
WH-70-J-664-12 1/2	-	90°-13°	12 1/2*	317.5	1 5/64	27.4
WH-70-J-667	J-667	90°-11°	7 1/2*	190.5	1 5/64	27.4
WH-71-J-9	-	55°-35°	9	228.6	1 33/64	38.5
WH-72-J-21 1/4	-	70°-20°	21 1/4	539.8	1 5/64	27.4
WH-72-J-28	-	70°-20°	28	711.2	1 5/64	27.4
WH-73-J-21 1/4	-	60°-30°	21 1/4	539.8	1 3/8	34.9

<sup>\*</sup>BENT AWAY FROM RIM

Any other lengths can be ordered.

All valves equipped with core and hex cap. On lengths over 6", 2 lock nuts are furnished.



#### TRIPLE BEND SWIVEL VALVES

HALTEC NO.	TR NO.	BEND ANGLE	HORIZONTAL INCHES	LENGTH MM	VERTICAL INCHES	HEIGHT MM
WH-75-J-662	J-662	90°-20°-20°	14	355.6	1 5/64	27.4
WH-75-J-662-10 1/2	-	90°-20°-20°	10 1/2	266.7	1 5/64	27.4
WH-75-J-663	J-663	90°-8°-8°	25	635	1 5/64	27.4
WH-75-J-665	J-665	90°-13°-13°	32	812.8	1 5/64	27.4
WH-75-J-666	J-666	84°-6°-31°-31°	20 1/8	511.2	1 5/64	27.4



LARGE BORE AIR-LIQUID VALVE

#### SPECIAL HYDROFLATING VALVES

Designed for faster filling of tires with liquid. Does not contain valve core. Straight-through 5/16" opening is sealed with special O-ring cap No. A-151. Used on loader tire in conjunction with similar Large Bore Air Valve.

#### **AIR WATER VALVE**

Used in conjunction with WH-330-J-694 Large Bore valve.

HALTEC NO.	TR NO.	BEND	"L" HORIZ. LENGTH		CAP	
		ANGLE	INCHES	MM		
WH-JF-994	JF-994	28°	3 1/2	88.9	A-151	



#### LARGE RADIUS, HIGH BEND AIR VALVE USED WITH 977S

All valves fit 13/16" valve hole.

Uses A-145 valve core and A-149 cap.

HALTEC NO.	BEND	"L" LEI	NGTH	"H" HEIGHT	
TIALILE INO.	ANGLE	INCHES MM		INCHES	MM
114S-5 1/2	90°	5 1/2	139.7	2	50.8
114S-11	90°	11	279.4	2	50.8
Can be ordered in any length.					



#### LARGE RADIUS, HIGH BEND AIR LIQUID VALVE

Uses Super Large Bore T-81 spud (TR-SP-8). Uses A-151 cap.

HALTEC	BEND	"L" LE	NGTH	"H" HEIGHT	
NO.	ANGLE	INCHES	MM	INCHES	MM
977S-5 1/2	90°	5 1/2	139.7	2	50.8
977S-11	90°	11	279.4	2	50.8
Can be ordered in any length.					



#### TUBELESS TIRE REPAIR KIT

RK-800 - Off-Road Tubeless Tire Kit Consists of:

RK-810 - Tire insertion tool (1)

RK-820 - Tire material (1Box-50, 12" strips) RK-830 - Tire repair compound (8 oz.)

RK-840 - Tire concentrated leak finder material (1) RK-850 - Tire concentrated leak finder applicator (1)

Items can be ordered separately



#### HD-100 TIRE REPAIR KIT

Kit Includes: Injector Tool (HD-100-1), 2 PSP Material (HD-100-2), Bonding Compound (HD-100-3), Leak Seeker Concentrate (HD-100-4), Leak Seeker Applicator(HD-100-5), Skiving Knife(HD-100-9), Reamer Tool(HD-100-10), and Metal Box.







**VALVES** 

All Valves Complete With Core, Cap, Spud Nut, and Grommet.



#### TURRET VALVE FOR PLANETARY GEAR WHEELS

HALTEC NO.	TR	ANGLE	OFF	SET	HORIZO		ANGLE
	NO.	BEND 1	IN	MM	IN	MM	BEND 2
WH-330-J-690	J-690	28°	9/16	14.3	4 11/16	119.1	28°
*WH-330-J-691	J-691	18°	-	-	3 5/16	84.1	-
*WH-330-J-691B	J-691	18°	-	-	8 1/2	203.2	-
WH-330-J-692	J-692	28°	9/16	14.3	4 11/16	119.1	18°
WH-330-J-693	J-693	60°	1	25.4	5	127	60°
*WH-330-J-694	J-694	28°	-	-	3 1/2	88.9	-
WH-330-J-695	J-695	50°	1	25.4	4 1/8	104.8	50°
WH-330-J-696 *Single bend	J-696	42°	29/32	23	4 1/4	108	42°



#### **DOUBLE SPUD VALVES**

#### DS-400-LENGTH

This Large Bore double spud valve eliminates most of the plugging of Large Bore valves, which occurs at the bend of the swivel-type Large Bore valve.



#### WH-44 LENGTHS RIGID EXTENSION FOR **DOUBLE SPUD**

Can be ordered in any length.



#### LOADER TIRE VALVE T-670

Loader tire valve complete with core, hex cap, and O-ring seal. Thread size is 1 1/16"-12.

#### LOADER TIRE VALVE

HAITECNIO	HEIG	CAP	
HALTEC NO.	INCHES	MM	CAP
T-670	1 25/32	45.4	A-149



#### TANK VALVE H-47

Screw-in type valve with 1/4" male pipe thread. Complete with core and cap.

For rims with valve hole counterbore on O.D. of rim.

#### TANK VALVE

HALTEC NO.	TR NO.	HEIGHT		
HALIEC NO.	IK NO.	INCHES	MM	
H-47	J-671	1 19/32	40.5	
H_47I		2.1	E3 3	







H-43

DS-390 For rims with 1/2" tapered pipe thread rim hole.

H-43 Double Spud plug

DS-385



STRAIGHT VALVES AND EXTENSIONS

#### STRAIGHT VALVES

Tubeless spud, used with all Large Bore swivel valves. Fits 13/16" rim hole.

#### H-42

Straight valve, equipped with core and hex cap.

#### H-45

Spud and valve complete. Consists of H-41 & H-42.

#### STRAIGHT VALVES

HALTEC NO.	TR NO.	-	HEIGHT
HALILE NO.	IK NO.	INCHES	MM
H-41	SP-2	11/16	15.8
H-42	TRJ-670-2	1 1/2	38.1
H-45	TRJ-670-3	1 5/8	41.3

#### **TECH TIP**

THE ULTIMATE FLOW RESTRICTION IN ANY INFLATION/DEFLATION SERVICE IS THE DIAMETER OF THE VALVE AND/OR VALVE CORE.



H-41





#### HAND-BENDABLE EXTENSIONS

HALTEC NO.	EFFECTIVE LENGTH		
TIALILO NO.	INCHES	MM	
753S-3 1/2	3 1/2	89.6	
753S-4	4	101.6	
753S-4 1/2	4 1/2	114.3	
753S-8	8	203.2	
753S-9	9	228.6	
753S-10	10	254	
753S-11 1/2	11 1/2	292.1	
753S-12	12	304.8	
753S-13 1/2	13 1/2	342.9	
753S-16	16	406.4	
753S-17	17	431.8	
753S-17 1/2	17 1/2	444.5	
753S-18	18	457.2	
753S-18 1/2	18 1/2	469.9	
753S-19	19	482.6	
753S-20 1/2	20 1/2	520.7	
753S-21	21	533.4	
753S-21 1/2	21 1/2	546.1	
753S-22 1/2	22 1/2	571.5	
753S-23	23	584.2	
753S-23 1/2	23 1/2	596.9	
753S-24 1/2	24 1/2	622.3	
753S-25	25	635.3	
753S-29 1/2	29 1/2	749.3	
753S-32	32	812.8	

#### **TECH TIP**

THE 3/4" HEX SEALING NUT, 463, IS INCLUDED WITH EACH EXTENSION. THE NUT COMES WITH A WASHER THAT FORMS A TIGHT SEAL BETWEEN THE EXTENSION AND THE VALVE. IT ALSO ACTS AS A LOCK, TO KEEP THE EXTENSION FROM COMING LOOSE. FOR SHIPPING PURPOSES, THE 463 SEALING NUT IS SCREWED ONTO THE EXTENSION, BUT WHEN IN USE MUST BE MOVED TO THE VALVE BEFORE INSTALLING THE EXTENSION.

## **EXTENSIONS**

#### HAND-BENDABLE

Equipped with 2 lock nuts and 3/4" hex sealing nut. A teflon gasket seals on end of valve, the lead seal in the sealing nut is forced into the threads for a second seal, positively locking extension to valve. Cap and core not included. They should be removed from valve and transferred to extension. Should be anchored to rim.

Other lengths can be ordered.



753S- LENGTH



**EXTENSIONS** 

#### RIGID BRASS EXTENSION

All-brass extension used where mounted in straight line with valve. Full-length deflector pin opens core in valve when servicing. Equipped with hex cap and 2 lock nuts on extensions over 5" in length. Replacement seal is available (part #F-454). Other lengths can be ordered.



#### **RIGID BRASS EXTENSIONS**

III ITEC NO	EFFECTIVE LENGTH		
HALTEC NO.	INCHES	MM	
867-1 1/4	1 1/4	31.8	
867-1 1/2	1 1/2	38.1	
867-2	2	50.8	
867-2 1/2	2 1/2	63.5	
867-3	3	76.2	
867-3 3/8	3 3/8	85.7	
867-4	4	101.6	
867-4 1/2	4 1/2	114.3	
867-5	5	127	
867-5 9/16	5 9/16	141.3	
867-6	6	152.5	
867-6 7/8	6 7/8	174.6	
867-7 1/4	7 1/4	184.2	
867-7 3/4	7 3/4	196.8	
867-8	8	203.2	
867-8 1/2	8 1/2	216.2	
867-9	9	228.6	
867-10	10	254	
867-10 3/4	10 3/4	273	
867-12	12	304.8	
867-12 1/2	12 1/2	317.5	
867-16	16	406.4	
867-18 7/8	18 7/8	479.4	
867-22 1/2	22 1/2	571.5	
867-24 1/2	24 1/2	622.3	

#### FLEXIBLE EXTENSION

Made with tough rubber hose and reusable hydraulic-type fittings. Equipped with 2 lock nuts and 3/4" hex sealing nut. A teflon gasket seals on end of valve. The lead seal in the sealing nut is forced into the threads for a second seal, positively locking extension to valve. Cap and core are not included. They should be removed from valve and transferred to extension. Other lengths can be ordered.



810F-L

#### **FLEXIBLE EXTENSIONS**

IIII TECNIO	EFFECTIVE LENGTH		
HALTEC NO.	INCHES	MM	
810F-8	8	203.2	
810F-9	9	228.6	
810F-10	10	254	
810F-11 1/2	11 1/2	292.1	
810F-12	12	304.8	
810F-13 1/2	13 1/2	342.9	
810F-16	16	406.4	
810F-17	17	431.8	
810F-17 1/2	17 1/2	444.5	
810F-18	18	457.2	
810F-18 1/2	18 1/2	469.9	
810F-19	19	482.6	
810F-20 1/2	20 1/2	520.7	
810F-21 1/2	21 1/2	546.1	
810F-22 1/2	22 1/2	571.5	
810F-23	23	584.2	
810F-23 1/2	23 1/2	596.9	
810F-24 1/2	24 1/2	622.3	
810F-25	25	635	
810F-29 1/2	29 1/2	749.3	
810F-32	32	812.8	
810F-40	40	1016	



**EXTENSIONS** 

## CUSTOM-BENT SWIVEL VALVES AND EXTENSIONS FOR CATERPILLAR (OE VALVES)

HALTEC NO.	OVERALL LENGTH (")	NUMBER OF BENDS	TYPE	
WHG-0570VC	19 31/32	5	Valve	
WHG-1450VC	32 7/8	5	Valve	
WHG-4985VC	19 3/4	4	Valve	
WHG-5200VC	27	5	Valve	
WHG-5410VC	31 9/16	5	Valve	
WHG-5420VC	33	5	Valve	
WHG-8018VC	26 3/4	4	Valve	
WHG-8019VC	8	1	Valve	-
WHG-9440VC	27	5	Valve	
WHG-9470VC	31 1/2	5	Valve	
WHG-5112VC	28 3/8	4	Valve	
WHG-8852VC	18 9/16	4	Valve	
WHD-5922EC	15 1/4	5	Extension	
WHD-7940EC	19	5	Extension	
WHD-7949EC	28 7/8	4	Extension	
WHD-7948EC	20 5/8	4	Extension	
WHD-0585EC	17 15/16	4	Extension	
WHD-5008EC	17 13/16	4	Extension	
WHD-7103EC	16 1/4	4	Extension	
WHD-9903EC	16 7/8	4	Extension	
WHD-7601EC	16 3/4	4	Extension	
WHD-7602EC	14 1/4	4	Extension	



#### LARGE BORE SCREW-ON VALVES FOR INNER TUBES

HALTEC		(A)	(B) VERT.	HEIGHT	(C) HORIZ	LENGTH
NO.	TR NO.	ANGLE BEND	INCHES	MM	INCHES	MM
LB-216*	J-1014	Strt.	1 29/32	48.4	-	-
LB-217*	J-1076A	Strt.	4 5/32	105.6	-	-
LB-218*	J-1076B	86°	1 1/8	28.6	3 1/4	82.6
LB-219*	J-1076C	90°	1 1/2	38.1	2 7/8	73
LB-220*	J-1076D	90°	2 1/16	52.4	2 5/16	58.7
LB-221*	J-1076E	88°	1 3/8	34.9	3	76.2
LB-223*	J-1175A	Strt.	5 9/32	134.1	-	-
LB-224*	J-1175B	82°	1 1/4	31.8	4 1/4	108
LB-225*	J-1175C	88°	1 3/8	34.9	4 1/8	104.8
LB-226*	J-1078A	Strt.	5 25/32	146.8	-	-
LB-227*	J-1078B	82°	1 3/8	34.9	4 5/8	117.5
LB-228*	J-1078C	90°	1 1/8	28.6	4 7/8	123.8
LB-229*	J-1179A	Strt.	6 13/32	162.7	-	-
LB-230*	J-1179B	88°	1 3/8	34.9	5 1/4	133.4
LB-231*	J-1179C	86°	1 3/8	28.6	5 1/2	139.7

#### H-4000 ADAPTER

H-4000 adapter converts tubes having SP-1000 type spud to accept Large Bore swivel valves. Equipped with BW-18 washer and used with rim slots.
H-4000-1 Adapter Same as H-4000 except without bridge washer and hex nut.

These valves are supplied in straight or bent form ready for installation on tubes. Equipped with A-145 valve core and A-149 hex cap. Used with SP-1000 tube spud.









## PT VALVE SYSTEMS

PT VALVE SYSTEMS

#### **TECH TIP**

A SPECIALLY DESIGNED TIRE VALVE ALLOWS FOR CONSTANT VISUAL PRESSURE CHECKS. IN ORDER TO USE PT GAUGE YOU MUST USE A SPECIAL PT TIRE VALVE.



#### PT GAUGE

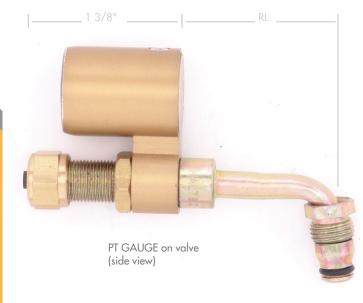
The PT Valve System is a design that allows tire pressure to be monitored with an easy-to-read, liquid filled, dial gauge attached to the valve. PT gauge is ordered separately. Comes with gauge and nut. Calibrated 0-160 PSI.

The PT valve and gauge can be used on most Large Bore, Super Large and Z-Bore applications. Patent Pending

This gauge mounts on specially designed PT-style valves which allow visual tire pressure checks yet also allows for inflation, deflation, and manual pressure checks without removing the gauge.

The PT gauge has an all-anodized aluminum body and is completely sealed to prevent moisture from fogging the glow-in-the-dark dial.

The PT Gauge is liquid filled to prevent damage from vibration.



When ordering valves for steering rim assemblies, check the rear length measurement (RL) so the device will clear the valve lug. This is important on some front truck rims and rear forklift or container mover tires.

#### **TECH TIP**

AFTER FUEL, TIRES ARE OFTEN A FLEET'S LARGEST EXPENSE. THE BEST WAY TO ENSURE MAXIMUM TIRE LIFE IS THROUGH PROPER TIRE INFLATION. USING A PT VALVE AND GAUGE ASSEMBLY, TIRE PRESSURE MONITORING HAS NEVER BEEN EASIER. USE THE PT GAUGE FOR DAILY CHECKS AND A SEPARATE MASTER GAUGE FOR WEEKLY CHECKS AND YOU WILL CATCH AIR LOSS BEFORE IT CAN CAUSE PERMANENT TIRE DAMAGE.

BY SELECTING THE RIGHT PT VALVE FOR THE APPLICATION, A GAUGE CAN BE INSTALLED ON VIRTUALLY ANY MACHINE WITHOUT THE GAUGE ASSEMBLY BEING VULNERABLE TO DAMAGE. ON SOME JOB SITES AIR PRESSURE ALMOST NEVER GETS CHECKED UNTIL IT IS VISUALLY NOTICED AND BY THIS TIME PERMANENT TIRE DAMAGE HAS OCCURRED. THE PT VALVE AND GAUGE ASSEMBLY WILL RAISE THE AWARENESS LEVEL OF MACHINE OPERATORS, MAKING IT EASIER FOR THEM TO RECOGNIZE A LOW TIRE BEFORE DAMAGE HAS BEEN DONE.



# VALVE SYSTEMS

#### PTC BLOCK-OFF COLLAR

When the gauge is not being used, a PTC block-off collar can be installed to prevent air leakage. 5/8" hex.

#### PT-R-520

All PT valves have trouble-free, urethane O-rings on the valve barrel. For Super Large Bore applications, order the PT-R-520 core housing. Compatible for use with the IN-80A.

#### PT-EX

Large Bore extension with 1 5/8" effective length to allow PT Gauge installation on existing valves.

#### PT-EX-DP

Same as above, but comes equipped with internal deflector pin , therefore the core does not need to be moved from the valve.







#### PT VALVE SYSTEM

HALTEC NO.	DESCRIPTION	CAP
PT Gauge	Gauge with nut for use on PT valves, 0-160 PSI	-
PTC	Block-off collar for PT valves when gauge is not attached	-
PT-300-J-650	WH-300-J-650 with PT grooves and O-rings	A-150
PT-45-6	WH-45-6 with PT grooves and O-rings	A-150
PT-330-J-690	WH-330-J690 with PT grooves and O-rings	A-150
PT-H-42	H-42 with PT grooves and O-rings	A-150
PT-753S-6	753S-6 with PT grooves and O-rings	A-150
PT-R-520	R-520 with PT grooves and O-rings for Super Large Bore	A-150
PT-330-3 1/2	Turret-style valve with 3 1/2" effective length	A-150

• Other Valves and Sizes Available

TL-634

and PTC collar.

- To order other valves add the prefix "PT" to the Haltec valve number
- Assemble the valve to the tire and wheel assembly before installing the PT gauge to the PT valve.







TL-634

## PT-Z10 Z-BORE CORE HOUSING All PT valves have trouble-free, urethane O-rings on the valve barrel. For

All PT valves have trouble-free, urethane O-rings on the valve barrel. For Z-Bore applications, order the PT-Z10 core housing. Compatible for use with the IN-95A.

Tightens nut to hold PT gauge on valve assembly. Also tightens A-150 cap















#### **COMPONENTS OF THE HALTEC SUPER LARGE BORE SYSTEM**

M-1950 complete swivel valve, including R-520 core housing and T-81 spud. M-1900: Same as M-1950 but without T-81 spud.

The Super Large Bore Valve System was developed in 1972. There are four parts to the valve and a unique inflator is also needed to maximize the air flow.

- 1 There are three spud designs:
  - a. The standard clamp-in spud (T-81/T-82)
  - b. The screw-in spud (C-100/C-155/C-134)
  - c. The angle screw-in spud (S-85)
- The next component is the swivel angle connector which threads onto the spud.

  There are different angles and lengths to accommodate the requirements of the customer. (R-525 Series)
- The next component is a flexible extension which can be made in any length. (MT-3000 Series)
- The core housing makes up the final component. It contains a Large Bore Valve Core for servicing the tire assembly for routine pressure checks and allows the complete core housing removal for the Super Large Bore application. It can also be installed in any of the previous components for a shorter valve. (R-520)
- To maximize air flow, an IN-80A or an IN-95 inflator is used to remove the core housing during inflation and deflation.

  A kit to allow extension assembly in the field is available. Rigid extensions

A kit to allow extension assembly in the field is available. Rigid extensions are also available. *The Super Large Bore Valve System is more than three times faster than a Large Bore Valve.* 



**CLAMP-IN SPUDS, SCREW-IN SPUDS** 





**CLICK TO VIEW VIDEO** FOR HYDRAULIC **VALVE TOOL** FIELD ASSEMBLY



CLICK TO VIEW VIDEO FOR MANUAL **VALVE TOOL** FIELD ASSEMBLY



#### **CLAMP IN SPUDS**

#### T-81 CLAMP-IN SPUD

Fits the 13/16" diameter valve hole. The T-81 spud (TR-SP8) can attach any Super Large Bore valve to the rim through a standard valve hole (13/16" diameter). Tire must be dismounted to change spud.

#### T-82 CLAMP-IN SPUD

Similar to the T-81 spud but with an effective length 1/4" longer.

#### **SCREW-IN SPUDS 1/2" & 3/4"NPT TAPPED HOLE**

#### S-85 ANGLE SCREW-IN SPUD

S-85 angle screw-in spud. Fits 1/2" NPT-tapped rim hole.  $85^{\circ}$ bend angle. Other angles available.

#### S-85-D ANGLE SCREW-IN SPUD

Furnished with a locking nut with a teflon seal so direction can be reversed. 85° bend angle.

#### SLB-85 3/4" NPT SUPER LARGE BORE **ANGLE SPUD**

Screw-in spud, fits 3/4" NPT-tapped rim hole 85° bend.

#### C-100/ C-155 SCREW-IN SPUD

The screw-in spud is used to attach any of the Super Large Bore valves to the rim and is designed to screw into a 1/2" NPT-tapped rim hole. The spud can be changed without dismounting the tire. C-100 has internal threads for core housing. C-155 has no internal thread.

ENGINEERED &

#### C-134 3/4" NPT SCREW-IN SPUD

3/4" NPT Screw-in spud















SWIVEL ANGLE CONNECTOR, FLEXIBLE EXTENSIONS



#### 2 SWIVEL ANGLE CONNECTOR

Component two of the Super Large Bore System is generally a swivel connector that screws on the spud.

Connectors of various angles and lengths are available.

The other end of the connector accommodates a MT-3000 flexible extension which attaches to the R-520 core housing or the 6185 check valve

HALTEC NO.	BEND ANGLE
R-525	90°
R-685	85°
R-625	80°
R-675	75°
R-660	60°
R-529 5 1/4"	90°



#### MT-3000 FLEXIBLE EXTENSION SERIES



Flexible extensions are made up in any length to allow the extension to fit the wheel configuration. The specially designed fittings and thermoplastic hose will not fatigue or crush during service. Corrosion problems are eliminated. Another important benefit of the Haltec Super Large Bore System is the ability to customize your extension in the field. The R-969-K and R-969K-1 kits are available to field assemble your own flexible extensions with the T-620 assembly tool.





#### **SLBHAT**

This tool is used to assemble Super Large Bore flexible valves. The tool uses hydraulic power supplied by one of the air hydraulic pumps and does the work of pulling the mandrel through the hose fittings. It is fully portable and can be used anywhere an air hydraulic pump is available.



## ASSEMBLY KIT FOR SUPER LARGE BORE VALVES FIELD SERVICE

#### R-969K-1

Consists of R-762S swivel connector, R-763 straight tubing connector, R-764R (2) tubing connector sleeves, and B-222 nuts (2).

#### R-969-K

Consists of the above plus the R-520 core housing complete with core and cap.

#### R - 760

Extension Tubing - available in 50' and 100' lengths. For proper field assembly, cut R-760 hose 2 1/4" shorter than required length and complete with swivel angle connectors and core housing.

#### HT-R760 HIGH TEMP SLEEVE

High temp hose is used to protect R-760 in applications where temperatures are high enough to damage the R-760. The HT-760 is cut to length and slid over the R-760, then held in place with hose clamps.





**CORE HOUSING, CHECK VALVE** 

#### 4 CORE HOUSING OR CHECK VALVE

## R-520 (TR-CH-8) CORE HOUSING COMPLETE WITH CORE AND CAP

The R-520 is designated at Tire and Rim as the CH-8. It is an integral part of the system as the CH-8 is removed from the valve assembly with the Haltec IN-80A adapter to utilize the larger opening and the fullest flow.



R-520

## 6185 (TR-L-860) CHECK VALVE COMPLETE WITH CAP

The 6185 design permits rapid inflation and deflation. Eliminates need for core housing and inflation adapter. Used with 6190 air chuck.



6185

## 6190 QUICK CONNECTION INFLATION CHUCK

Designed specifically for use with 6185 check valve. Sliding sleeve locks air chuck onto check valve and permits unrestricted air flow. Gauging can be done through valve on chuck. Positive air line shut off valve must be installed in back of air chuck.



## R-520B CORE HOUSING COMPLETE WITH CORE AND CAP

The R-520B is designated at Tire and Rim as the CH-8. It is an integral part of the system as the CH-8 is removed from the valve assembly with the Haltec IN-80A adapter to utilize the larger opening and the fullest flow.





#### A-449 SUPER LARGE BORE PROTECTIVE CAP

Locks the R-520 in place and cannot be removed until the A-449 is removed. Adds extra security by keeping the R-520 core housing in place deterring the tire from going flat. Protects the 11/16-24 thread on the valve.





#### A-150 CAP

Low profile, Large Bore hex cap. 5/8" hex.



A-150

#### A-155 PLASTIC LARGE BORE CAP

Plastic Large Bore Sealing Cap



A-155

#### TL-800 CORE HOUSING REPLACEMENT TOOL

Safely removes and replaces the R-520 core housing without losing pressure in the tire. Brass ball valve made of corrosion-resistant brass.





**INFLATOR ADAPTER** 



#### **TECH TIP**



#### 5 INFLATOR ADAPTER

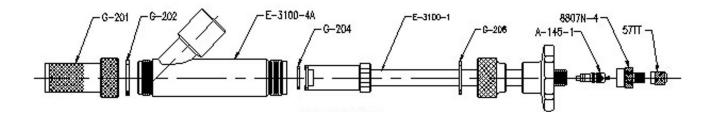
#### IN-80A SUPER LARGE BORE INFLATOR ADAPTER

The Haltec design of the Super Large Bore inflator adapter offers many advantages.

- 1/2" pipe thread for easy air hose connection. During inflation, air pressure in the tire can be checked through the stem knob with a tire pressure gauge.
- Reduces inflation time 60%, deflation time 80%.
- The core housing is held in a stainless steel extractor by a snap ring.
- Extractor is rugged enough so that the core housing can be loosened or tightened without being damaged. The IN-80A inflator adapter saves time by fast inflation or deflation on a tire. After removing the valve cap, the inflator is screwed onto the valve stem. The inflator stem is pushed in to engage the flats on the core housing. By rotating the stem counter clockwise, the core housing can be removed without any danger to the person removing it. The core housing is pulled up into the inflator body and held there during inflation or deflation. Can also be used for liquid-filling tires equipped with Super Large Bore valves.

#### **IN-80A PARTS LIST:**

- G-201 Ejector Union
- E-3100-4A Adapter Body
- G-206 Gasket for E-3100-1
- 8807N-4 Cap Adapter
- E-3100-1 Complete Stem and Collet
- G-202 Gasket for G-201
- G-204 Snap Ring for Collet
- A-145 Large Bore Valve Core
- 57TT Standard Bore Cap





#### B050121005 MUFFLER FOR IN-80A

Muffles sound which protects the hearing of operator while deflating the tire. 1/2" fitting attaches to the IN-80A inflator. Decibel rating between 17-25 DBA.



**RIGID METAL SWIVEL VALVES** 

#### **RIGID METAL SWIVEL VALVES**

#### MR-800 SWIVEL VALVE

MR-800-Length. Rigid metal swivel valve with R-520 core housing and (2) B-222 lock nuts. Can be ordered in different lengths.



#### MR-850 SWIVEL VALVE

MR-850-Length. Same as MR-800 except with a T-81 rim spud.



#### MR-890 TURRET VALVE

MR-890-Length. Rigid metal turret-type valve with R-520 core housing, B-222 lock nuts (3).



MR-890

#### M-2000 SWIVEL VALVE ASSEMBLY

A 90° swivel valve having 3 1/8" horizontal length.



M-2000

#### **CUSTOM VALVES**

Custom valves can be formed with any bends and lengths to fit specific applications.





**CUSTOM SUPER LARGE BORE VALVES** 









**DOUBLE SPUD ASSEMBLY** 



DS-210P

DS-215



#### DS-296 SUPER LARGE BORE DOUBLE SPUD VALVE ASSEMBLY (WITH FLEXIBLE EXTENSION)

Designed for wheels where space is critical. Valve height above rim is only 7/8". Consists of DS-210 double spud, DS-215 plug and MT-4000length flexible extension.



#### MT-4000 LENGTH FLEXIBLE EXTENSION

Used with DS-296 and PB-210. Any length can be ordered. Consisting of: DS-226 connector, R-763 connector, R-764R sleeves (2), R-760 tubing.



#### N -1538B

7 7/8" long Super Large Bore turret valve with 15° bend, used on Caterpillar applications.



N-1543A

6 1/8" long Super Large Bore turret valve with 15° bend, used on Caterpillar applications.



S-7910



#### N-1066 SUPER LARGE BORE LOADER VALVE

Accepts R-520 core housing or other Super Large Bore swivel fittings. Thread size is 1 1/16"-12. Super Large Bore version of T-670.

S-7910 VALVE SUPPORT





**AIR-LIQUID VALVES** 

#### SUPER LARGE BORE AIR-LIQUID VALVE FOR TRACTOR & GRADER

#### M-5000 VALVE ASSEMBLY

Screw-in type spud with O-ring seal. R-521 core housings not interchangeable in other Super Large Bore spuds. Thread size is 3/4" - 16.



#### M-1870 VALVE ASSEMBLY

Super Large Bore straight valve assembly consists of R-520 core housing and T-81 spud.

#### N-1050 VALVE ASSEMBLY

Same as M-1870 but with T-82 spud.



#### H-50 (TR-F-910)

Straight Valve Assembly Components T-81 spud and R-372 core housing.



H-50



R-372

#### R-372 (CH-16)

Fits T-81, C-100 & SP816 tube spud.

#### **TECH TIP**

THE FLOW OF THE LARGE BORE VALVE IS THREE TIMES MORE AIR THAN THE STANDARD BORE VALVE. THE SUPER LARGE BORE VALVE IS FOUR TIMES MORE AIR THAN A LARGE BORE VALVE.

MEASURED IN COST OF DOWNTIME AND THE COST TO SERVICE LARGE OFF-THE-ROAD TIRES, SUPER LARGE BORE IS A BARGAIN.

AS THE TREND CONTINUES TOWARD LARGER VEHICLES WITH LARGER TIRES, THE NEED IS FOR FASTER, MORE EFFICIENT TIRE SERVICING.

SUPER LARGE BORE FILLS THAT NEED. FOR EVEN FASTER AIR FLOW, SEE THE MEGA BORE VALVE SYSTEM ON PAGE 34 OR THE Z-BORE ON PAGE 30.













#### **COMPONENTS OF THE HALTEC Z-BORE SYSTEM**

The Z-Bore Valve System is very similar to the Super Large Bore System. By using an O-ring seal to clamp the spud to the rim, a greater flow diameter is created without sacrificing strength or performance.

- 1 There are three basic spud designs:
  - a. The standard clamp-in spud (Z2)
  - b. The screw-in spud (Z1)
  - c. The angle screw-in spud (Z4)
- The second component is the swivel angle connector which threads onto the spud. As with Super Large Bore Valves, you can install a core housing into the spuds to make a valve.
- 3 The Z-Bore Flexible Extension can be made up in various lengths.
- The core housing is the final component. It contains a Large Bore Valve Core for servicing the tire assembly for routine pressure checks and allows the complete core housing removal for the Z-Bore application.
- To maximize air flow, a Z12-B or IN-95 inflator is used to remove the core housing during inflation and deflation. This inflator operates like the Super Large Bore Inflator.

Like Super Large Bore Extensions, you can use a kit to allow extension assembly in the field. Rigid extensions are also be available. Z-Bore flows 370 CFM compared to 240 CFM on the Super Large Bore Valve System.



RIM SPUDS



#### **RIM SPUDS**

There are three spud types available: the standard clamp-in spud, a screw-in spud, and an angle screw-in spud.

The Z-Bore Valve System is very similar to the Super Large Bore System. By using an O-ring to seal the clamp-in spud to the rim, a greater flow diameter is created without sacrificing strength or performance.

#### **Z2 CLAMP-IN SPUD**

Fits the 13/16" diameter valve hole. The Z-2 spud can attach any Z-Bore valve to the rim through a standard valve hole (13/16"). Tire must be dismounted to change spud.

#### Z1 SCREW-IN SPUD

The screw-in spud is used to attach any of the "tapped" Valves to the rim and is designed to screw into a 1/2" NPT-tapped hole. The spud can be changed without demounting the tire.

#### **Z13 SCREW-IN SPUD**

The Z-13 screw-in spud screws into the 3/4" NPT-tapped rim hole and converts Mega Bore to Z-Bore.

#### **Z4 ANGLE SCREW-IN SPUD**

Fits 1/2" NPT-tapped rim hole. 85° bend angle.

#### **TECH TIP**

Z-BORE FLOWS 370 CFM COMPARED TO 240 CFM ON THE SUPER LARGE BORE VALVE SYSTEM.











ANGLE CONNECTOR AND EXTENSIONS





#### ANGLE CONNECTORS

The second component is the swivel angle connector which threads onto the spud. As with Super Large Bore valves, you can install a core housing into the spuds to make a valve.

#### ANGLE CONNECTOR

Connectors of various angles and lengths are available. The connector accommodates a flexible extension which attaches to the Z-10 core housing.

#### ANGLE CONNECTORS

HALTEC NO.	ANGLE
Z3-60	60°
Z3-75	75°
Z3-80	80°
Z3-90	90°



#### KOMATSU EXTENSIONS

	KOMATSU NO.	HALTEC NO.
	PC0664	ZBR-0664
	PC0581	ZBF-0581
	PC0663	ZBF-0663



#### THE Z-BORE FLEXIBLE EXTENSION CAN BE MADE IN VARIOUS LENGTHS

Flexible extensions are made in any length to allow the extension to fit the wheel configuration. The specially designed fittings and thermoplastic hose will not fatigue or crush during service. Corrosion problems are eliminated. Another important benefit of the Haltec Z-Bore System is the ability to customize your extension in the field. The ZFAK field assembly kit is available to field assemble your own flexible extension with the Z5 assembly tool.



**ZBFE-LENGTH** 



HT-Z-100 HIGH TEMP SLEEVE Used to protect Z-100 tubing.



**Z-BORE COMPONENTS AND INFLATOR ADAPTER** 

#### ZFAK - ASSEMBLY KIT FOR Z-BORE VALVES

ZFAK consists of Z8 Swivel connector, Z17 straight tubing connector, two Z2-2 nuts, two Z9 tubing connector sleeves and Z10 core housing. Z-100 tubing is ordered separately.



The core housing is the final component. It contains a Large Bore valve core for servicing the tire assembly for routine pressure checks. The Z12-B inflator allows the complete removal of the core housing for the Z-Bore application. For proper field assembly, cut Z-100 hose 2 1/4" shorter than required length and complete with angle connectors and core housing.

#### **Z10 CORE HOUSING**

Complete with Core and Cap, the Z10 is an integral part of the system as the Z10 is removed from the valve assembly with the Haltec Z12-B Inflator to utilize the larger opening and the fullest flow.



#### **Z12-B INFLATOR**

To maximize air flow, a Z12-B inflator is used to remove the core housing during inflation & deflation. This inflator operates like the IN-80A Super Large Bore inflator as seen on page 26.

#### Z12-B PARTS LIST:

- Z55 Ejector Union
- G-202 Gasket for Z11
- MB-60P Gasket for Z55
- G-204 Snap Ring for Collet
- E-3100-1 Stem & Collet
- G-206 Gasket for Stem Nut
- 8807N-4 Cap Adapter • 57TT Standard Bore Cap







Z12-B

#### 3/4-14 NPT E - 3100 - 1MB-55-3 8807N-4 MB-60P G-206

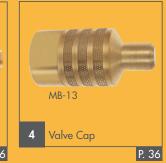




## MEGA BORE VALVE SYSTEMS









#### **COMPONENTS OF THE HALTEC MEGA BORE SYSTEM**

The Mega Bore Valve System is unique because it uses a different hole size than other valve systems. There are several other features which make this system unique.

- 1 There are three types of rim spuds:
  - a. The clamp-in spud for the 15/16" rim hole.
  - b. The angled screw-in spud for the 3/4" NPT rim hole.
  - c. Screw-in spud for the 3/4" NPT rim hole.
- The second component is an angle connector which screws onto the clamp-in or the screw-in spud. The rigid Mega Bore Valve can be screwed into the angle adapters and angle screw-in spuds.
- The next component is either the rigid Mega Bore Valve or the Mega Bore Flexible Valve which has the Retractable Core Housing permanently assembled to the extension. The original Mega Bore Valves have a retractable, but not removable, core housing. The new style mega bore valves use a removable core housing similar to Super Large Bore and Z-Bore.
- There is also a unique cap to the Mega Bore System to protect the side vent air holes and threads of the valve.
- To maximize air flow, an MB-8 inflator is used to retract the core housing during inflation and deflation. For routine pressure checks you can still use any Large Bore pressure gauge or air chuck. The new style mega bore valve utilizes the IN-95 for inflation and deflation.
- Like the Super Large Bore and the Z-Bore Valve Systems, the Mega Bore Flexible Extensions can be field assembled.

  Mega Bore flows 550 CFM compared to 240 CFM on the Super Large Bore System.



## MEGA BORE VALVE SYSTEMS

**RIM SPUDS, ANGLE CONNECTORS** 



#### **RIM SPUDS**

#### MB-20 CLAMP-IN SPUD

Fits a 15/16" diameter valve hole. Tire must be dismounted to change spud. Attach any Mega Bore angle connector to the MB-20 spud.

#### MB-26 SCREW-IN SPUD

Fits a 3/4" NPT threaded valve hole, screw-in spud. Attach any Mega Bore angle connector to the MB-26 spud. Spud can be changed without demounting tire.

## MB-12-85 & MB-12-75 SCREW-IN ANGLE

The screw-in spud is used on a 3/4" tapped rim hole. Attaches to a MB-14 rigid or a FMB flexible Mega Bore valve. The spud can be changed without demounting the tire.

#### **ANGLE CONNECTORS**

#### MB-19-85 & MB-19-75 ANGLE CONNECTORS

An angle connector screws onto the MB-20 spud. The other end of the connector accommodates a MB-14 rigid valve or a FMB flexible Mega Bore valve.

#### MB-29-85 ANGLE CONNECTORS

An angle connector screws onto the MB-20 spud. The other end of the connector accommodates a MB-27 rigid valve or Caterpillar O-ring face seal hydraulic hose.



MB-20



MB-26



MB-12-85



MB-19-85



MB-29-85

FMB-8

MB-25

## MEGA BORE VALVE SYSTEMS

**VALVES, CAPS, INFLATOR** 

#### **VALVES**



#### MB-14 RIGID MEGA BORE VALVE

Rigid Mega Bore valve can be screwed into any Mega Bore angle connector or screw-in spud.

#### MB-27 FACE SEAL MEGA BORE VALVE

Rigid Mega Bore valve can be screwed onto MB-29 angle connector or Caterpillar O-ring face seal hydraulic fittings.



#### FMB LENGTH MEGA BORE FLEXIBLE VALVE

Screws into the Mega Bore angle connectors or screw-in angle spud. Can be made in any length (minimum 8"). The specially designed fittings and thermoplastic hose will not crush or fatigue during service. Large Bore threads on the core housing allow use of Large Bore pressure gauges.



#### MBV-L

Screws into the Mega Bore angle connectors or screw-in angle spud. Made to length in the field using the MBAT assembly tool. MB-14 screws into the end to complete the valve.



#### **CAPS**

#### MB-25 HEX CAP

Cap for the Mega Bore core housing. Protects core housing from damage. Has an O-ring seal. Has modified Hex that can be installed or removed using the TL-700.



#### MB-13 VALVE CAP

Cap for the Mega Bore core housing. Protects core housing from damage. Has an O-ring seal.



### **INFLATOR**

#### MB-8 INFLATOR

The MB-8 Mega Bore inflator attaches to the valve body by turning the knurled nut on the inflator in a clockwise direction. The 3/4" ball valve is used to open and close the air flow after the core housing is retracted with the TL-700.

#### HT-R-761 HIGH TEMP SLEEVE

Used to protect R-761 tubing.



HT-R-761

#### TL-700 TOOL

The TL-700 fits the Mega Bore core housing to retract the housing for inflation and deflation. The TL-700 should be used only in conjunction with the MB-8 Mega Bore inflator. The MB-8 inflator should be engaged on the core housing before using the TL-700.



TL-700

#### **NEW**

#### MBRC-8 MEGA BORE VALVE REMOVABLE CORE **HOUSING 8"**

Mega Bore flexible valve with removable core housing. Can be made in any length (minimum 8"). Can be assembled in field.









#### **NEW**

#### MB-56 RIGID MEGA BORE VALVE

Rigid Mega Bore valve can be screwed into any Mega Bore angle connector or screw-in spud. With removable core housing.



MB-56



**INFLATOR** 

#### COMPONENTS FOR MEGA BORE FLEXIBLE VALVE FIELD ASSEMBLY



For proper field assembly, cut R-761 hose 2 3/4" shorter than required length and complete with angle connectors and core housing.

## 6 INFLATOR

#### **IN-95 INFLATOR ADAPTER**

Haltec Model IN-95 Inflator Adapter for Air or Liquid Filling of Large Earthmover Tires when Equipped with Super Large Bore, Z-Bore, and Mega Bore Valves.

The IN-95 will insert or extract an R-372, R-520, Z10, or an MB-50 core housing and positively hold it up in the adapter body out of the air or liquid flow when filling or evacuating a tire. The inflator adapter can be attached to any liquid filling tire pump since it has 3/4" pipe thread. With the adapter attached to the valve, the pressure in the tire can be checked without disconnecting it from the valve, with a large bore gauge, through the end of the adapter stem. All IN-95 parts are brass except the collet, which is stainless steel and the hand knob, which is aluminum.



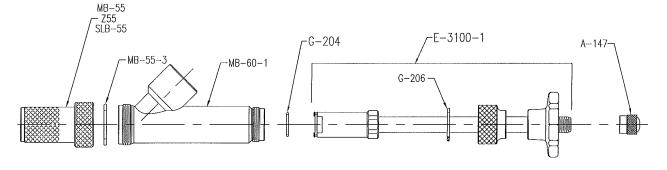


#### IN-95 PARTS LIST:

SLB-55 Super Large Bore ejector union Z55 Z- bore ejector union MB-55 mega bore ejector union MB-55-3 gasket ejector unions MB-60-1 Adapter body E-3100-1 Stem and collet G-204 Snap ring G-206 Gasket for stem nut A-147 Dome cap







## O-RINGS & L RINGS

**O-RINGS & L RINGS** 

## STANDARD AND ARCTIC O-RINGS FOR TUBELESS RIMS

OK TODLLL	JJ KIMIJ		
HALTEC NO.	TIRE TYPE	RIM SIZE	ROD DIAMETER
OR-21-T	Highway	21"	
OR-25-T	Earthmover	25"	
OR-20-JM	Highway (JM Rim)	20"	(.26)
OR-22-JM	Highway (JM Rim)	22"	
OR-24-JM	Highway (JM Rim)	24"	
OR-215-H	Grader	15"	
OR-217-L	Grader	17"	(.28)
OR-220-TG	Grader	20"	
OR-224-TG	Grader	24"	(.26)
OR-225-T	Grader	25"	
OR-321-T	Earthmover	21"	
OR-325-T	Earthmover	25"	
OR-329-T	Earthmover	29"	
OR-333-T	Earthmover	33"	
OR-335-T	Earthmover	35"	(.385)
OR-339-T	Earthmover	39"	
OR-343-T	Earthmover	43"	
OR-345-T	Earthmover	45"	
OR-349-T	Earthmover	49"	
OR-449-T	Earthmover	49"	
OR-451-T	Earthmover	51"	
OR-451-OVM	Earthmover	51"	
OR-457-T	Earthmover	57"	(.50)
OR-457-OVM	Earthmover	57"	
OR-463-T	Earthmover	63"	
OR-463-OVM	Earthmover	63"	
OR-469-T	Earthmover	69"	

#### **TECH TIP**

HALTEC O-RINGS PASS ALL OE SPECS

OR-25-T

#### STANDARD AND ARCTIC O-RINGS FOR TUBELESS RIMS

- Packaged 2 per poly bag
- 24 O-rings per case
- Sold in case lots
- Consistent product quality
- Manufactured of high-quality material
- O-rings individually marked in an easy-to-read color
- Manufactured to major OEM specifications
- Spliced O-ring with sonic weld technology
- Extruded product allows diameter variation to meet the wide variety of rim O-ring grooves, both domestic and foreign
- Two compounds for all service conditions: Standard -40°F to 180°F Arctic -65°F to 180°F
- Customized product available for special applications. For Arctic O-rings add the letter "A" to the end of the part number.



High temperature silicone O-rings available upon request



#### L-RING SEALS FOR EARTHMOVER RIMS

HALTEC NO.	DESCRIPTON
LR-10	10" L-ring seal
LR-12	12" L-ring seal
LR-15	15" L-ring seal
LR-16	16" L-ring seal
LR-20	20" L-ring seal
LR-24	24" L-ring seal
LR-25	25" L-ring seal
LR-29	29" L-ring seal
LR-33	33" L-ring seal
LR-35	35" L-ring seal
LR-39	39" L-ring seal
LR-45	45" L-ring seal
LR-49	49" L-ring seal
LR-51	51" L-ring seal
LR-57	57" L-ring seal
LR-63	63" L-ring seal
LR-69	69" L-ring seal

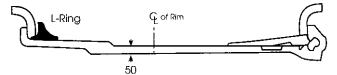
#### L-RING SEALS FOR EARTHMOVER RIMS PROPER USE OF HALTEC L-RING SEALS

The primary purpose of the L-ring seal is to create an air seal where the tire bead and rim bead seat are not completely compatible. Some of the examples where the L-seal will prove useful:

- Where you have an irregular butt weld in the knurled bead seat area.
- Where, during initial inflation, the bead seating is very difficult.
- When an air passage between the bead and the rim is identified.
- Where overloads and severe operating conditions cause the rim deformation (deflection) which can result in air leakage.

#### IMPORTANT INFORMATION

- L-Ring Seals are not a cure for damaged beads nor damaged wheels and rims. Caution should be used during all fitments. Do not install where broken bead is suspected.
- Always follow the respective manufacturers' recommendation for proper bead-lubrication and initial air pressure to properly seat beads.
- If you have any questions regarding the use of the L-Ring Seals, contact Haltec prior to attempting any installation.







VALVES



#### TRUCK AND BUS VALVES

Straight clamp-in valves used on both demountable and non-demountable rims. For .625" diameter valve hole. Bent valve stems also available. Haltec custom bends the TV-570 series valves.

#### TRUCK AND BUS VALVES

HALTEC NO.	TR NUMBER	EFFECTIVE LENGTH
TV-500	500	2"
TV-501	501	1 1/2"
TV-570	570	3 1/8"
TV-571	571	3 3/8"
TV-572	572	3 3/4"
TV-573	573	4 3/8"
TV-574	574	5"
TV-575	575	1 1/8"

#### CUSTOM BENT VALVES AVAILABLE UPON REQUEST

Haltec can custom bend and fabricate any tire valve hardware need at its manufacturing facility in Salem, Ohio. This allows us to provide prototype samples which ultimately lead to innovative solutions for our customers.



#### TV-572-HT WITH HIGH TEMP GROMMET

Equipped with the G-170S high temperature grommet. Ideal for houses, cement trucks, and garbage trucks.



#### TV-573-HT WITH HIGH TEMP GROMMET

Equipped with the G-170S high temperature grommet. Ideal for buses,cement trucks, and garbage trucks.



## TR-572-ASC HIGH TEMP. ADVANCED SEAL TRUCK VALVE

Recessed grommet for advanced seal. Torque 80-125 inch punds.13° Bend with an effective length of 3 3/4".



#### H-572-0 3 3/4" STRAIGHT VALVE - VITON™

O-ring seal for high temperature usage such as garbage trucks and buses.



#### H-573-0 4 3/8" STRAIGHT VALVE - VITON™

O-ring seal for high temperature usage such as garbage trucks and buses.

#### **TECH TIP**

ALL GROMMETS ON 570 SERIES VALVES ARE U.S. MADE

#### **TECH TIP**

ALL HALTEC SNAP-IN VALVES PASS ALL SAE REQUIREMENTS

TV-6040

#### **EINKY VALVES**

A high-performance "No Show" type chrome-plated valve that installs from the outside. A rubber washer and nut are on the inside.

#### **EINKY VALVES**

HALTEC NO.	BEND ANGLE	EFFECTIVE LENGTH	VALVE HOLE
TV-6010	STR.	3/4"	.453
TV-6020	45°	-	.453
TV-6030	STR.	1 1/4"	.453
TV-6040	STR.	1 3/4"	.453
TV-6050	90°	2 5/8"	.453



Used on car and light truck applications. Maximum inflation pressure 130 PSI.

#### **CLAMP-IN VALVE**

		EFFECTIVE	VALVE
HALTEC NO.	TR NO.	LENGTH	HOLE
TV-416	416	1 1/4"	.453 or .625
TV-416L	-	2"	both grommets furnished

#### **DOUBLE BEND VALVES**

For tubeless truck and bus tires. Extra-low vertical height clamp-in type. Fits .625" valve hole.

#### **DOUBLE BEND VALVES**

HALTEC NO.	TR NO.	EFFECTIVE LENGTH
TV-513	513	2 5/8"
TV-515	515	3 1/4"

#### **SNAP-IN TIRE VALVE & CHROME SLEEVE TIRE VAIVES**

VALVES			
HALTEC NO.	TR NO.	EFFECTIVE LENGTH	VALVE HOLE
TV-412	412	7/8"	.453
TV-413	413	1 1/4"	.453
TV-414	414	1 1/2"	.453
TV-415	415	1 1/4"	.625
TV-418	418	2"	.453
TV-423	423	2 1/2"	.453
TV-425	425	2"	.625
TV-413-CH	Chrome	1 1/4"	.453
TV-418-CH	Chrome	2"	.453

Maximum cold inflation pressure 65 PSI.



TV-6020





VAIVES



TV-430







TV-6008C TV-6008

H-523MS





TV-801-HP TV-802-HP

TV-600-HP TV-602-HP







#### TV-430 TUBELESS MOTORCYCLE VALVE

Has O-ring seal, fits .327" valve holes. Effective length is 1 3/16".

#### TV-575-HP

Low profile with 1" E.L. Has grommets to fit either .453" or .625" diameter valve hole.

#### TV-6008C

Tractor Front Wheel Valve Low profile valve offers minimum protrusion above the rim. 9/16" effective length with chrome finish. Fits .453" or .625" valve hole.

#### TV-6008

Same as above except brass finish.

#### H-523MS ALLOY VALVE

A light alloy valve used on racing and light alloy wheels. Fits .453" valve hole and has O-ring seal.

#### HIGH-PRESSURE TUBELESS TIRE VALVE

TV-600-HP and TV-602-HP used to 80 PSI cold inflation pressure, and fits .453" diameter valve hole, maximum rim thickness .205" at valve hole. TV-801-HP and TV-802-HP used to 100 PSI cold inflation pressure, and fits .625" diameter valve hole, maximum thickness .205" at valve hole. Designed for use with transporting mobile homes.

#### HIGH-PRESSURE TUBELESS TIRE VALVE

HALTEC NO.	TR NO.	EFFECTIVE LENGTH	VALVE HOLE
TV-600-HP	600HP	1 1/4"	.453"
TV-602-HP	602HP	2"	.453"
TV-801-HP	801HP	1 1/4"	.625"
TV-802-HP	802HP	2"	.625"

#### N-1147 RADIAL COMMANDER

Valve N-1147 for 15" Disc Wheels 23° bend clamp-down valve for .625" valve hole. Bend allows clearance of brake drum for tire service.

#### CUSTOM BENT VALVES AVAILABLE UPON REQUEST

Haltec can custom bend and fabricate any tire valve hardware need at its manufacturing facility in Salem, Ohio. This allows us to provide prototype samples which ultimately lead to innovative solutions for our customers.

#### TV-417 CLAMP-IN VALVE (TR417)

This valve is designed for front-wheel drive Toronado ('66-'78) and El Dorado ('67-'78) cars. 453 valve hole.

#### **SCREW-ON REPAIR VALVES**

HALTEC NO.	TR NO.	EFFECTIVE LENGTH
RV-1177A	1177A	3 1/4"
RV-1077A	1077A	4 1/8"
RV-1175A	1175A	4 1/2"
RV-1078A	1078A	5"
RV-1179A	1179A	5 5/8"

For trucks and bus, tube-type tires. A quick replacement for broken tube valves with body thread. Cut off valve and screw on repair valve without cutting out old valve base. (with bridge washer). Can be used with SP-1000 tube spud.

#### METRIC RIM HOLE VALVE (9.7MM VALVE HOLE)

Some imported trucks will have steel wheels that incorporate the 9.7mm valve hole (.390"). These are the most popular valves for this applica-

#### METRIC RIM HOLE VALVE (9.7MM VALVE HOLE)

		*		*
HALTEC NO.	ETRTO	BEND	A HEIGHT	B HEIGHT
60 MS-27	No ETRTO	27°	1 3/16"	1 3/16"
70 MS-27	V3-20-5	27°	1 3/16"	1 9/16"
80 MS-27	V3-20-7	27°	1 3/16"	2"
90 MS-27	V3-20-4	27°	1 3/16"	2 3/8"
115 MS-27	V3-20-6	27°	1 3/16"	3 3/8"
41 MS-00 Other sizes available	V3-20-1	STR	1 3/16"	-



#### TRUCK VALVES FOR ALUMINUM TRUCK WHEELS

Tubeless valves used in drop-center aluminum disc wheels with .625 valve hole. Rubber Grommet available (part # G-172).

#### TRUCK VALVES FOR ALUMINUM TRUCK WHEELS

HALTEC NO.	TR NO.	BEND ANGLE	E.L.
TV-509	TR-509	90°	4 3/4"
TV-510	TR-510	90°	5 1/2"
TV-511	TR-511	90°	4 1/4"



#### 70 MS-7

- Aluminum wheel valve with grommet seal.
- Fits 9.7 mm

#### TV-540 SERIES, O-RING SEAL VALVES FOR ALUMI-NUM TRUCK WHEELS (9.7MM VALVE HOLE)

HALTEC NO.	VALVE TR NO.	A HEIGHT	BEND ANGLE	B LENGTH	HEX NUT
TV-542	542	1.25	-	-	HN-22
TV-543	543	2.4	-	-	HN-22
H-543C	543C	0.93	45°	1.43	HN-22
TV-543D	543D	0.98	60°	1.38	HN-22
TV-543E	543E	0.98	75°	1.38	HN-22
TV-544	544	2.9	-	-	HN-22
TV-544C	544C	0.98	45°	1.94	HN-22
TV-544D	544D	0.98	60°	1.94	HN-22
TV-545	545	3.5	-	-	HN-22
TV-545D	545D	0.98	60°	2.6	HN-22
TV-545E	545E	0.98	75°	2.6	HN-22
TV-546	546	4.25	-	=	HN-22
TV-546D	546D	0.98	60°	3.35	HN-22
TV-546E	546E	0.98	75°	3.35	HN-22
TV-546G	546G	0.98	105°	3.35	HN-22
TV-546-36	546-36	0.98	36°	3.35	HN-22
TV-547D	547D	0.98	60°	3.78	HN-22





**VALVES** 

#### **TECH TIP**

THE SLOT ON THE BOTTOM OF THE 550 SERIES ALLOWS FOR EASY INSTALLATION



#### **TECH TIP**

KEEP ALL O-RING SURFACES AS CLEAN AS POSSIBLE WHILE ASSEMBLING VALVES



TV-575HP/DS-I



N-1600



TV-416LF



TV-416/DS-1



TV-550 SERIES

#### Features:

- Longer sealing life
- Greater corrosion resistance
- Larger sealing surface
- Slot and external hex for easier installation
- Viton™ replacement grommet G-550
- Grommet has better temperature range and tear resistance
- Grommet must be used on TV-550 Series only, not for use on 540 valve series

GROMMET SEAL VALVES FOR ALCOA TRUCK WHEELS (9.7MM VALVE HOLE)						
HALTEC NO.	VALVE TR NO.	A HEIGHT	BEND ANGLE	B LENGTH	HEX NUT	
TV-552	552	1.26	-	-	HN-22	
TV-553	553	2.4	-	-	HN-22	
TV-553C	553C	.93	45°	1.43	HN-22	
TV-553D	553D	.98	60°	1.38	HN-22	
TV-553E	553E	.98	75°	1.38	HN-22	
TV-554D	554D	.98	60°	1.94	HN-22	
TV-555D	555D	.98	60°	2.6	HN-22	
TV-555E	555E	.98	75°	2.6	HN-22	

#### TV-575HP/DS-1

- Ford .453 "Cut-Away" and Cargo Van Series with Single Rear Wheels
   Accuride Steel 16" x 7" Wheels
- Front & Rear Wheels
- Chrome Finish
- .453

#### N-1600

- Ford "F" Series Trucks with Dual Wheels
- Alcoa Aluminum 16"
- Front & Rear Wheels
- Chrome Finish
- .453

#### TV-416LF

- Ford "Cut-Away" Series with Dual Wheels
- Accuride Steel 16' x 16" Wheels
- Front & Rear Wheels
- Nickle Finish
- .453

#### TV-416/DS-1

- Ford "F" Series Trucks with Dual Wheels
- Accuride Steel 19.5"
- Front & Rear Wheels
- Nickle Finish
- .453

#### TV-416MC

- Ford "F" Series Trucks with Dual Wheels
- Accuride Steel 16" x 16"
- Front & Rear Wheels
- Nickle Finish
- .453

## VALVE EXTENSIONS

**EXTENSIONS AND STABILIZERS** 

#### TRUCK VALVE EXTENSIONS

HALTEC NO.	DESCRIPTION	COLLAR TYPE	EFFECTIVE LENGTH
HE-369	Truck Extension	Short 3/8"	1 3/8"
HE-370	Truck Extension	Short 3/8"	2"
HE-371	Truck Extension	Short 3/8"	2 15/16"
HE-372	Truck Extension	Short 3/8"	3 15/16"
HE-373	Truck Extension	Short 3/8"	5 1/8"
HE-389	Truck Extension	Long 1"	1 1/16"
HE-390	Truck Extension	Long 1"	2"
HE-390A	Truck Extension	Long collar	2"
HE-391	Truck Extension	Long 1"	2 15/16"
HE-391A	Truck Extension	Long collar	2 15/16"
HE-392	Truck Extension	Long 1"	5 1/8"
HE-392A	Truck Extension	Long collar	5 1/8"
HE-393	Truck Extension	Long 1"	6"
HE-393A	Truck Extension	Long collar	6"
HE-394	Truck Extension	Long 1"	8.0"
HE-395	Truck Extension	Long 1"	10.0"
HE-396	Truck Extension	Long 1"	12.0"
HE-397	Truck Extension	Long 1"	14.0"
HE4430	Truck Extension	Long 1"	4"
Standard Style	-	-	-
HE-381	Truck Extension	Long 1"	3 1/16"
HE-382	Truck Extension	Long 1"	5 1/16"
HE-383	Truck Extension	Long 1"	6 1/16"



/ 1200/ 1 0 1/ 1			
HALTEC NO.	FITS ALCOA WHEEL SIZE	DIAMETER HAND HOLE	HOLE POSITION
FCSTBL	Freightliner,	Custom	Center
H-2125	19.5"	1.50"	Center
H-2126	19.5"	1.50"	Off-Center
H-2127	22.5 x 9.0	1.50"	Center
H-2225	22.5"	2.00"	Center
H-2245	24.5"	2.19"	Off-Center
H-2246	Peterbilt	Oval	Center
H-2227	22.5"	2.50"	Center
H-2247	24.5"	2.375"	Off-Center
H-2257	Freightliner 19.5"	Custom	Center
H-27245	24.5	Hand Hole2.69"	Off-Center
H-8864	22.5" & 24.5	2.50"	Off-Center
H-8964	Prevost	2.00"	Off-Center
H-2248	Freightliner	1.3125"	Center
MNCSTBL	Monaco Coach	Custom	Off-Center

#### STABILIZER & EXTENSION KIT

HALTEC NO.	STABILIZER (2)	EXTENSIONS (2)			
125392	H-2125	HE-392			
126392	H-2126	HE-392			
127393	H-2127	HE-393			
225392	H-2225	HE-392			
227392	H-2227	HE-392			
245392	H-2245	HE-392			
246392	H-2246	HE-392			
247392	H-2247	HE-392			
257392	H-2257	HE-392			



#### TRUCK VALVE EXTENSIONS HE-370 SERIES LIGHTWEIGHT EXTENSIONS

Series has the short collar for use on tube-type or tubeless valves. Available in 2"-3"-4" and 5" effective lengths. Has a double seal feature to assure a positive seal. .305-32 cap thread



#### HE-380 SERIES STRAIGHT METAL EXTENSIONS

These screw on the standard valve stem (.305-32 cap thread) and make the valve mouth accessible for service. .305-32 cap thread



## HE-390 SERIES LIGHTWEIGHT EXTENSIONS

Lightweight extensions are the same as above except with a long collar.



## HE-390A SERIES LIGHTWEIGHT ALUMINUM EXTENSIONS

Extremely light weight aluminum extensions.

## ALCOA STABILIZER & EXTENSION KIT

Proper air pressure is the most important factor in lengthening tire life. On dual wheel assemblies, the inner dual is many times overlooked or improperly serviced. The Alcoa Extension and Stabilizer Kit allows access to the inner dual tire valve and properly positions and supports the extension for servicing. The stabilizer reduces the road vibration on the extension and practically eliminates valve stem breakage caused by vibration.







Available in 12 sizes. Each stabilizer kit contains 2 stabilizers and 2 extensions.





## VALVE EXTENSIONS

**EXTENSIONS** 

#### **TECH TIP**

HALTEC'S DS-1 FLOW-THROUGH CAPS WILL INCREASE THE SPEED WITH WHICH YOUR FLEET DRIVERS AND MAINTENANCE TECHNICIANS COMPLETE THEIR TIRE MAINTENANCE. ALLOWS INFLATION AND DEFLATION THROUGH CAP.



DS-I

#### **DOUBLE SEAL CAP DS-1**

The DS-1 flow-through valve cap is designed for high pressure truck tire service. Seals like a high pressure valve cap, yet offers the convenience of an inflate through extension. It also performs like a check valve- the seal becomes tighter in the event of a core failure. The DS-1 reduces pressure check time by 65% offering a efficient money and labor savings alternative to the common valve cap. The heat resistant grommets provide additional protection for the extended high temperature running. The DS-1 consists of a tough, all metal housing, precision fit brass components and durable self-sealing O-ring.

#### Benefits:

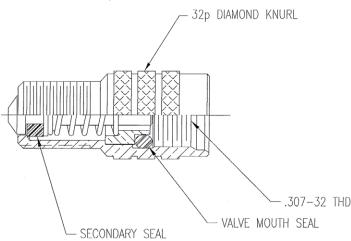
- Inflate directly through sealing cap
- Reduces time and labor
- No lost valve caps

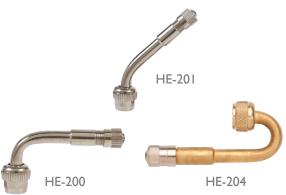
#### Technical Specifications:

- Overall length 7/8"
- Temperature rated seal: -40°F to 250°F



TECH TIP





#### BENT EXTENSIONS FOR STANDARD BORE VALVES

HALTEC NO.	BEND	EFFECTIVE LENGTH	VERTICAL LENGTH
HE-200	90°	1 3/8"	3/4"
HE-201	45°	1 3/8"	3/4"
HE-202	135°	1 3/8"	15/16"
HE-203	24°	5 7/16"	N/A
HE-204	180°	1 7/16"	1/2"



## DUAL WHEEL FLEXIBLE VALVE EXTENSIONS FE-300 LENGTH

This extension provides easy access to the inner dual tire found on campers, recreational vehicles, and light trucks. Fits standard valve cap threads. Comes with clamp to secure extension to wheel cut-out. 2 extensions per pack. Standard effective lengths are 7" and 9". Effective to 200 PSI Also available, clamp part number FE-300CL, which clamps directly to the lug nut. Other lengths available upon request.

#### SFE-400 LENGTH

Similar to the FE-300 series except has steel braid over rubber hose.

## SPECIAL APPLICATIONS

STRUT VALVES, HIGH-PRESSURE INFLATING CONNECTIONS

#### HIGH-PRESSURE SHOCK STRUT VALVES

Constructed of stainless steel bodies for use in high-pressure shock absorber units, hydraulic pressure accumulators, surge cylinders, and high-pressure pneumatic systems. Valves have 1/2" - 20 U.N.F. - 3A threads for connection to container.

#### H-7607 SHOCK STRUT VALVE

For operating pressure to 2,000 PSI. Conforms to AN-812-1.

#### H-4361 SHOCK STRUT VALVE

For operating pressure to 3,000 PSI. Conforms to AN-6287-1.

#### H-798 SHOCK STRUT VALVE

For use on shock struts where operating pressure is rated for 5,000 PSI. Conforms to MS-28889-2



#### H-6116B

Fits .305-32 thread size with 1/8" NPT female connection with 70° bend. Equipped with hard fiber sealing washer. Used up to 5000 PSI working pressure.



Same as H-6116B except has straight extension.

#### 5007

Fits .305-32 thread size with 7/16-20 thread for 1/4" flare tube fitting. Meets MS 33656E4. Maximum pressure rating is 15,000 PSI. Recommended torque 75 in/lb for steel valves. Has copper sealing washer.

#### H-556 **HIGH-PRESSURE** INFLATING CONNECTION

Fits .305-32 thread size with 1/8" NPT male connection. Has core depressor pin, and copper sealing washer. Maximum working pressure 3000 PSI.

#### H-2755

#### HIGH-PRESSURE INFLATING CONNECTION

Fits .305-32 thread size with 3/8-24 thread for 3/16" flare tube fitting, meets MS336556E3. Has core depressor pin and copper sealing washer. Maximum working pressure 3000 PSI.

#### 2755L

#### LARGE BORE HIGH-PRESSURE INFLATING CONNECTION.

Fits .482-26 thread size with 3/8-24 thread for 3/16" flare fitting. Has core depressor pin and copper sealing washer. Maximum working pressure 3000 PSI.





5007





## AIR/LIQUID VALVES

**VALVES AND COMPONENTS** 



#### AIR LIQUID VALVES FOR TRACTOR AND ROAD GRADER SERVICE

HALTEC NO.	TR NO.	А	В	BEND ANGLE	VALVE HOLE
TV-618A	TR-618A	1 7/8"	-	-	0.625"
TV-618B	TR-618B	1 1/2"	-	-	0.625"
TV-618RB	-	1 1/2"	-	-	0.625"
TV-618A-SS	TR-618A-SS	1 7/8"	-	-	0.625"
TV-621A	TR-621A	1 1/2"	3	65°	0.625"
TV-622A	TR-622A	1 3/4"	4 1/2	90°	0.625"
TV-623A	TR-623A	1 1/2"	2 1/4	65°	0.625"
N-1000	TR-619A	1 7/8"	-	-	0.812"
H-50	TR-F910B	1 13/16"	-	-	0.812"



#### TV-5905 AIR/ LIQUID EXTENSION

Used with tractor or grader valve stems. 90 degree angle for more accessible valve.

#### TRACTOR AND GRADER TUBE

HALTEC NO.	TR NO.	BASE DIAMETER	CORE HOUSING	VERTICAL HEIGHT	VALVE HOLE
TV-218R	TR-218A	2 1/2"	TV-CH-3	1 7/8"	0.625"
TV-220R	TR-220A	2 1/2"	TV-CH-3	2 15/16"	0.625"
TV-916R	TR-916A	3 1/4"	R-372	1 7/8"	0.812"

Valve assembles with removable core housing for liquid fill. Has Vulc-on back to allow field repair.

# LN-10

#### **B9A BUSHING ASSEMBLY**

Fits over TR-218A and TR-220A valves to allow use of valve in the 13/16" valve hole. Consists of B9-1 bushing and B9-2 nut.

#### LN-10 PLASTIC RIM NUT

RIM HOLE PLUGS

Rim nut for tractor tube valves TR-218A and TR-220A. For brass rim nut, order LN-10B. See page 57 for TL-LN-10 installation tool.

#### **B-6 BUSHING**

Fits over TR-13 tube valve when used in 5/8" valve hole.

#### CORE HOUSING

#### TV-CH-1

Fits old-style TR-218 and TR-220 valves.

#### TV-CH-3

Fits all fast flow air-liquid valves except Super Large Bore.

#### R-372/TR-CH-16

Fits SP816 tube spud and T-81 & C-100 spud.



R-372/TR-CH-16

## N-1012S

Used to seal 5/8" rim hole when relocating valve.

Used to plug 5/8" rim hole and avoid tube

#### **ALSP**

"pouching."

T-30

Air-liquid spud plug. Used to replace TV-CH-3 core housing.

Used to seal 13/16" rim

hole when relocating valve.







## LIQUID FILL

#### 310 VALVE ADAPTER GUN

Has a 1/2" female pipe thread and will attach to any calcium tire filling pump, it will extract the valve core from a Standard Bore valve or the core housing from a tractor valve. It will securely hold the valve core or core housing up in the gun body during tire filling or evacuation of liquid from a tire. Due to the design, it will permit faster evacuation of liquid from a tire than with other adapter guns. Replaces Deming #1010.

FP-134 Large Bore Core Remover FP-135 Adapter for Standard Valve (Equipped with FP-136)

FP-136 O-Ring for FP-135 Adapter FP-137 Standard Valve Core

Remover

FP-138 Ejector Union (Equipped with FP-146)

FP-139 Gasket FP-140 Stem

FP-141F Adapter Body

FP-142 Stem Sealing Nut FP-143 O-Ring for FP-142

(Stem Seal)

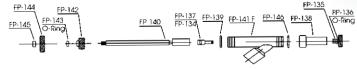
FP-144 Hand Wheel

FP-145 Lock Nut

FP-146 Teflon Gasket







#### N-1057

Flexible extension for 310 gun.

#### AQF-1 AQUA QUICK FILL HALTEC

Patent No. 5.007.448 Haltec's Aqua Quick Fill is a simple, time-saving tool that allows the user to fill a tractor tire or large off-the-road tire with liquid, and do other tasks while the tire is being filled. No longer does the user have to stand by and vent the excess air pressure. With the AQF-1, air is automatically vented through a side port while the liquid is being injected into the tire. When the tire is filled, the water escapes from the vent hole, indicating that the tire is full.

#### FLUID CONNECTORS

Coupler N-1451, 1/2 NPT female thread. Designed specifically for fluid use.

#### NIPPLE N-1452

1/2 NPT male thread. For fluid use

#### N-1091 WATER ADAPTER

N-1091 For liquid fill tires

#### 307 URETHANE FILL ADAPTER

Attaches directly to the urethane pump discharge hose with a 1/2" female pipe thread. An adapter bushing is provided to attach the gun union to a standard size tire valve. By removing the adapter bushing, the union can be attached to a tractor-type valve (TR-218A), a grader valve (TR-618A), or any Large Bore valve (TR-650). Delrin plugs are used to seal the valve after the tire is filled with urethane up to the desired pressure. The plugs are self-threaded into the valve by pushing in the hand wheel and turning clockwise. This permanently seals the valve and the adapter can be removed immediately. This is a much more positive method of sealing a tire that has been filled with urethane.

#### **PARTS LIST:**

FP-135 Adapter for Standard Valve (Equipped

FP-136 O-Ring for FP-135 Adapter

FP-138 Valve Stem & Ejector Union

(Equipped with FP-146) FP-139 Rubber Gasket

FP-141A Adapter Body

FP-142 Stem Sealing Nut

FP-143 O-Ring for FP-142 (Stem Seal)

FP-144 Hand Wheel

FP-145 Hex Lock Nut

FP-146 Teflon Gasket

FP-153 Collet Adapter for Standard Valve Plug

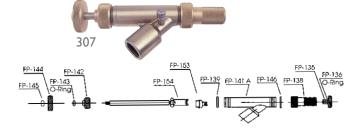
FP-154 Stem & Collet

FP-155 Snap Ring for FP-153









FP-156 Snap Ring for FP-154 P-250 Standard Valve Delrin Plug P-251 Tractor & Grader Valve

Delrin Plug

P-252 Large Bore Valve Delrin Plug

P-250F European Standard Valve Delrin Plug



## VALVE CORES, CAPS, ADAPTERS

**VALVE CORES: STANDARD & LARGE BORE, ADAPTERS** 



#### **VALVE CORES**

HALTEC NO.	TIRE & RIM NO.	DESCRIPTION
A-100-VC-1	C-1	Standard Bore Heat-Resistant Core for Cars, Trucks and Busses.
A-144	C-2	Large Bore Core (long). Fits 305-32 Threads
A-145	C-2	Large Bore Core (short). Fits 305-32 Threads



#### **VALVE CAPS (STANDARD BORE)**

VALVE CAI 3 (SIANDARD BORE)				
HALTEC NO.	TIRE & RIM NO.	DESCRIPTION		
57TT	-	Short dome cap.		
89TPMS-CAPG	-	Chrome-Plated Plastic Hex Cap for TPMS		
A-100-VC-2	VC-2	Metal Screwdriver Valve Cap for Removing Valve Cores		
A-100-VC-3	VC-3	Metal Dome Valve Cap		
A-100-VC-8	VC-8	Plastic Dome Valve Cap		
A-100-VC-8G	VC-8	Plastic Green Dome Valve Cap		
A-100-VC-12	-	Heavy-Duty Dome Cap for Truck Service. Has Heat-Resistant Sealing Washer.		
DS-1	-	Double Seal Valve Cap		
N-1202	-	Chrome-Plated Hex Cap		



#### **VALVE CAPS (LARGE BORE)**

HALTEC NO.	TIRE & RIM NO.	DESCRIPTION
A-148	VC-6	Screwdriver Valve Cap. Fits .482-26 Valve Threads.
A-149	VC-7	Hex Valve Cap for Easy Tightening and Removing with Wrench. Fits .482-26 Valve Cap
A-147	A-10	Dome Cap
8807N-3	VC-4	Screwdriver Cap for 8807N-4 and AD-1 Adapters
A-150	-	Large Bore Short Hex Cap
A-151	-	Used Only with Hydro Inflating Valves.
A-152	VC-10	Large Bore Short Dome Cap
A-155	-	Plastic Large Bore Sealing Cap



AD-I

#### **VALVE ADAPTERS**

AD-1

Adapts Large Bore valve down to Standard Bore. Fits in 305-32 valve core threads.

#### 8807N-4

Adapts Large Bore valve down to Standard Bore. Fits over .485-26 valve cap threads.

8807N-4

## GROMMETS, HEXNUTS, WASHERS

**GROMMETS, HEX NUTS, O-RINGS, WASHERS** 

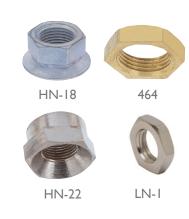
#### **GROMMETS**

HALTEC NO.	TIRE & RIM NO.	FITS	USED ON
5976-5	RG-54	.453 Valve Hole	TV-416, 416L, 6008
5976-6	RG-39	.625 Valve Hole	TV-416, 416L
G-160	RG-22	.812 Valve Hole	H-41, T-81, T-30, DS-385, DS210
G-162	RG-16	.812 Valve Hole	Turret Valves, PB-210, H-1000
G-165	-	.812 Valve Hole	K-431, K-665
G-166	RG-7	.625 Valve Hole	TV-618, 621A, 622A, 623A
G-170	RG-15	.625 Valve Hole	TV-500 Series, TV-570 Series
G-170S	-	.625 Valve Hole	Heat-Resistant Grommet for TV-570 Series
G-172	RG-46	.625 Valve Hole	TV-509, 510, 511
G-174	RG-48	.625 Valve Hole	TV-513, 515
G-550	RG-70	.975 Valve Hole	Fits TV-550 Series



#### **HEX NUTS**

IILX IIO			
HALTEC NO.	TIRE & RIM NO.	FITS	USED ON
451	HN-15	11/16-16	H-41, T-30
452	-	.485-26	K-431
463	-	-	753S, 810F (Jam Nut)
464	HN-1	.485-26	L.B. Valves, 753S, 810F, 867,TV-618A, 621A, 622A, 623A
10071	HN-13	.406-26	TV-500 Series, TV-570
B-222	HN-80	11/16-24	M-1900, M-1950, H-4000, MR-800, MR- 850, T-81
B9-2	LN-13	11/16-24	B9A Assembly
HN-17	HN-17	.406-28	TV-509, 510, 511
HN-18	HN-18	.406-28	TV-513, 515
HN-21	HN-21		TV-540 Series
HN-22	HN-22	.375-32	H-543C, TV-540, TV-550 Series
LN-1	HN-2		FE-300 Series
MSN-4	HN-23	.375-32	70MS-7



#### **O-RINGS**

0 1411 100		
HALTEC NO.	TIRE & RIM NO.	USED ON
0-320	-	Swivel Valves, H-43, H-42
0-330L	RG-60	TR-540 Series Valves
10008	-	T-670
10009	-	M-5000
A-126	-	R-762S, R-525 & SLB Angle Connections
A-127	-	R-520, R-372, R-521
A-128	-	DS-215, DS-226



#### **WASHERS**

***			
HALTEC NO.	TIRE & RIM NO.	FITS	USED ON
453	-	11/16-24	K-431, K-665
10058	RW-8	.406-28	TV-500 Series, TV-570 Series
10058B	RW-8	.406-28	TV-500 Series, TV-570 Series
RW-13	RW-13	.410-28	TV-416
W-1101-1	RW-11	.485-26	TV-618A, TV-621A, 622A, 623A





## TANK VALVES AND BEAD SEATERS

**VALVES, BEAD SEATERS** 



#### TANK VALVES

Utilized on pressure containers where gauging or servicing may be required. Tank valves are used with various gases, fluids and operating pressures. For specific application, please contact Haltec for technical assistance.

#### **TANK VALVES**

HALTEC NO.	OAL	BASE THREAD	CAP THREAD	HEX SIZE
TV-399	1 5/16"	1/8" NPT	.305-32	7/16"
TV-400	1 5/16"	1/4" NPT	.305-32	9/16"
TV-401	27/32"	1/8" NPT	.305-32	7/16"
TV-402	1 5/16"	1/8" NPT	.305-32	7/16"
H-47	1 19/32"	1/4" NPT	.482-26	9/16"
TV-400S	1"	1/4" NPT	.305-32	9/16"





#### RADIAL TIRE BEAD SEATERS

One-piece rubber tube for mounting hard-to-seat radial, bias belted or conventional truck tires. As tire is inflated, the lubricated bead seater forms a seal between the rim and tire allowing the air pressure to force the beads into the rim flange. As proper pressure is reached, the bead seater slides out and over the rim.

FOR TRUCK TIRES:

TC-30 for 13" Rims

TC-40 for 14-15" Rims

TC-50 for 16.5" and 17.5" Rims

TC-60 for 19.5" Rims

TC-63 for 20" Rims

TC-70 for 22.5" and 24.5" Rims

#### FOR PASSENGER TIRES:

PC-1 for 13" Rims

PC-2 for 14" and 15" Rims

PC-3 for 15" Rims

PC-4 for 17" Rims

PC-5 for 18" Rims

PC-6 for 20" Rims

PC-7 for 12" Rims

Note: OSHA Regulations require that service personnel use a clip-on air chuck with an inline inflator at a recommended distance that keeps the employee out of the trajectory of the tire and rim. After beads are seated, put tire and rim into approved inflation cage and continue to inflate to prescribed air pressure.



HX-44



HX-24

#### RIM GUARD HX-44

Protection cover for aluminum and chrome bolt hole areas while using an impact wrench.

#### WHEEL SHIELD HX-24

Protection cover for aluminum and chrome wheels. Snaps into place. Shows proper torque sequence numbers for wheel nuts.

## **SERVICE GAUGES**

**DUAL FOOT TRUCK GAUGES** 

#### **DUAL FOOT TRUCK SERVICE GAUGE**

Haltec offers a wide variety of service gauges to accommodate the numerous tire and wheel configurations encountered by the service personnel. Choose the gauge that best fits your particular needs.

#### **DUAL FOOT TRUCK SERVICE GAUGE**

HALTEC #	CALIBRATION	INCREMENTS	BAR	CHUCK STYLE	FINISH
DT-150	0-150 PSI	.5 PSI	N/A	Angled Chuck	Chrome
GA-135	10-150 PSI	2 PSI	Nylon	Angled Chuck	Chrome
GA-135S	10-150 PSI	2 PSI	Metal	Angled Chuck	Chrome
GA-140	10-160 PSI	2 PSI	Nylon	Angled Chuck	Chrome/Poly
GA-155	10-150 PSI	2 PSI	Nylon	Straight-on 30° Reverse	Chrome
GA-155S	10-150 PSI	2 PSI	Metal	Straight-on 30° Reverse	Chrome
GA-155S-RCL**	10-150 PSI	2 PSI	Metal	Straight-on 30° Reverse	Chrome
GA-165*	10-150 PSI	2 PSI	Nylon	Straight-on 30° Reverse	Black Polyurethane
GA-165S-RCL**	10-150 PSI	2 PSI	Nylon	Straight-on 30° Reverse	Chrome
GA-175*	10-150 PSI	2 PSI	Nylon	Angled Chuck	Black Polyurethane
GA-185	10-150 PSI	2 PSI	Nylon	Straight-on 180° Reverse	Chrome
GA-185S	10-150 PSI	2 PSI	Metal	Straight-on 180° Reverse	Chrome
GA-185SRCL**	10-150 PSa	2 PSI	Metal	Straight-on 180° Reverse	Chrome



#### **DUAL FOOT TRUCK HIGH-PRESSURE GAUGE**

#### **DUAL FOOT TRUCK HIGH-PRESSURE GAUGE**

HALTEC #	CALIBRATION	INCREMENTS	BAR	CHUCK STYLE	FINISH
GA-130	20-120 PSI	2 PSI	Nylon	Angled Chuck	Chrome
GA-150	20-120 PSI	2 PSI	Nylon	Straight-on 30° Reverse	Chrome
GA-160*	20-120 PSI	2 PSI	Nylon	Straight-on 30° Reverse	Black Polyurethane
GA-170*	20-120 PSI	2 PSI	Nylon	Angled Chuck	Black Polyurethane
*Extended Head	I				

GA-130 GA-150 GA-160

#### TIRE GAUGE GRIP TGG-1 TIRE GAUGE GRIP

Allows a positive grip on your gauge during inclement weather conditions and serves as a protective cushion should the gauge be inadvertently dropped. Can be used on all dual foot truck service gauges.



#### GA-189S-RCL ALUMINUM DUAL FOOT METAL BAR

Aluminum body. Easy to read metal slide bar. Calibrated 10-150 PSI 2-lb. increments. Straight on 30° reverse head for those hard-to-reach valves. Haltec replacement seal (10140) available.



GA-189S-RCL

<sup>\*\*</sup>Recalibratable, \*Extended Head



## **SERVICE GAUGES**

GAUGES



#### PENCIL TIRE GAUGES

Haltec Pencil-Type Tire Pressure Gauges have a highly polished finish with an easy-to-read, 4-sided nylon indicating bar and a handy pocket clip. NOTE: All pencil gauges have a chuck guide to assure gauge fits squarely on the tire valve. This prevents air leakage and guarantees accurate pressure readings.

GA-125

HALTEC #	CALIBRATION	INCREMENTS	BAR	SERVICE	FINISH
GA-100	1-20 PSI	1/2 PSI	Nylon	Garden Tractors, ATV's	Chrome
GA-105	10-50 PSI	1 PSI	Nylon	Passenger Tire	Chrome
GA-110M	10-50 PSI/73-325 kPa	1 PSI	Nylon	Passenger Tire	Chrome
GA-115	20-120 PSI	2 PSI	Nylon	Truck High Pressure	Chrome
GA-120M	20-120 PSI/150-800 kPa	2 PSI	Nylon	Truck High Pressure	Chrome
GA-125	5-45 PSI	1 PSI	Nylon	Air-Liquid Tires	Chrome
GA-145	10-75 PSI/70-500 kPa	1 PSI	Nylon	Radial & Spare Tire	Chrome
GA-146	20-90 PSI	1 PSI	Nylon	Radial & Light Truck	Chrome



#### GA-100DIS

Colorful display of 10 gauges of our GA-100 model

#### GA-105DIS

Colorful display of 10 gauges of our GA-105 model

#### **GA-115DIS**

Colorful display of 10 gauges of our GA-115 model

Private Label Gauges Available. Call For Details. 1-800-321-6471



#### GCS-A

#### GCS-A GAUGE CHECK STATION

Large 4" liquid filled gauge with 2lb. graduated increments. Pressure gauge provides clear pressure readings for greater test accuracy. Accuracy  $\pm$  1% full scale. Maximum operating pressure 160 PSI. Dimensions consists of 8 3/8" W x 7"H x 5" D.

#### **DIGITAL AIR GAUGES**

HALTEC NO.	OPERATING RANGE	INCREMENTS (PSI)	APPLICATION
GA-850-330	0-160	0.5	Standard Bore air gauge w/CH-330 dual foot air chuck
GA-850-350	0-160	0.5	Standard Bore air gauge w/CH-350 dual foot air chuck
GA-850-370	0-160	0.5	Standard Bore air gauge w/CH-370 dual foot air chuck
DT-105	0-100	0.5	Standard Bore digital air gauge
GA-850-377S	0-160	0.5	Fits Large Bore Digital Air Gauge with 377S air chuck



DIAL AIR GAGGES			
HALTEC NO.	OPERATING RANGE	INCREMENTS (PSI)	APPLICATION
GA-274	0-160	5	14" Standard & Large Bore Air Liquid Gauge
GA-276	0-160	5	18" Standard & Large Bore Gauge w/Extension Handle & bleeder valve
GA-290	0-160	1	12" Standard & Large Bore Air Master Gauge equipped with recalibra- tion feature
N-1055	0-160	5	12" Standard Bore Air Gauge; equipped with an CH-335 dual foot air chuck
GA-285	0-160	5	10" Dial Gauge with Rigid Extension
GA-289	0-160	5	Replacement Dial Gauge
N-1510	0-160	5	Cap Gauge; screws onto Large Bore & Super LargeBore valves for inspection of tire pressure
GA-300-377	0-160	2	15" Large Bore air gauge with built-in filter and accessible reservoir for easy cleaning









DT-105







## **GAUGES**









#### N-1420H TRUCK TREAD DEPTH GAUGE

- Calibrated in millimeters and 1/32nds of an inch.
- Measures shoulder wear as well as tread depth.
- Durable metal construction, chrome-plated.
- Comes in a clear protective plastic pouch.
- Can be custom imprinted.
- Pocket-size.

#### GA-190 TIRE TREAD DEPTH GAUGE

Quickly and accurately measures how much tread is left on tire. Calibrated in 1/32" units and millimeters. Chrome-plated brass with pocket clip.

#### GA-190S TIRE TREAD DEPTH GAUGE

With aluminum body, calibrated 1/32"

#### LARGE BORE GAUGES

These gauges work with all Large Bore, Super Large Bore, Z-Bore, and Mega Bore products.

#### GA-240 STRAIGHT PENCIL GAUGE

Straight-on chuck fits Standard and Large Bore valves. Calibrated 20-120 PSI in 2-lb. increments. Furnished with pocket clip.

#### GA-250 HIGH PRESSURE GAUGE

10-150 lbs. in 3 lb. units. For Standard and Large Bore valves. Has nylon indicating bar and Haltec Posi-Seal washer.

#### GA-250S

Same as above with metal indicating bar.

#### GA-255 LARGE BORE SWIVEL FOOT GAUGE

Quality Features:

- Nickel-plated brass
- Nylon slide bar. Easy to read.
- Calibrated 10-150 in 2 lb. units
- Swivels 360° for those hard-to-reach valves. Haltec Posi-Seal replacement washer (10095) available.

#### **GA-255S**

Same as above with metal indicating bar.

#### GA-255S-RCL - LARGE BORE SWIVEL GAUGE-RECALIBRATABLE

Recalibratable. Same description as GA-255S, see above.

#### N-1410 OFF- HIGHWAY TIRE TREAD DEPTH **GAUGE**

Indicating bar is calibrated with 32nds on one side, other side is millimeters. Has magnified sight-glass for easy readability. Comes with a carrying holster. The finest instrument available.

#### 5131-LARGE BORE TREAD DEPTH GAUGE

Two piece gauge made up of slide tube and indicator. Calibrated 0-6" in 1/32" units and 7 to 152 mm metric. Tubing spans tread lugs on off-road tires.

## LARGE BORE TOOLS

**SERVICE TOOLS** 

#### TL-680 THREE-WAY LARGE **BORE TOOL**

For removing large bore cores, hex caps and screw driver caps.

#### TL-690 FOUR-WAY LARGE BORE CORE TOOL

Thread repair for core and cap threads and core remover. For Large Bore and Super Large Bore.

#### TL-695

The TL-695 is a four-way tool that repairs the internal and external threads on air-liquid valve spuds. It also is a Large Bore valve core insertion tool, and it repairs internal and external threads.

#### ASP-10 DEFLATION ASPIRATOR

Tube deflation aspirator for Large Bore.

#### N-1610 LARGE BORE CORE TOOL

Large bore core tool, equipped with sliding sleeve which holds the core during removal.

#### N-1710 LARGE BORE CORE TOOL

Special valve core screwdriver tool. Sliding sleeve allows positive grip on valve core for those hard-to-reach valves.

#### N-1810 LARGE BORE HEX CAP REMOVER

With plastic handle for positive grip - OAL 10".

#### N-1910 LARGE BORE CORE REMOVER

Has plastic handle for positive grip - OAL 6".

#### TL-631 SUPER LARGE BORE RETHREADING TOOL

Used to rethread 11/16" - 24 thread on any Super Larger Bore valve.

#### TL-LN-10

The TL-LN-10 is a nut driver that installs the LN-10 nut onto the TV-218A/ TV-220A tractor tire valve.

#### 8909-C

Guides, aligns, and holds Large Bore valve through rim hole while mounting the tire.

















## LARGE BORE AIR CHUCKS

SHORT & LONG: DUAL FOOT, SCREW-ON, LOCK-ON, CLIP-ON









#### LARGE BORE AIR CHUCKS

## 322 LARGE BORE DUAL FOOT AIR CHUCK

 $45^{\circ}$  angle chuck allows easy access to the tire valve. Has 1/4" NPT female thread.

#### 326 SCREW-ON AIR CHUCK

Has .485-26 internal thread and 1/2" NPT external thread. Full flow for seating of tire beads.

#### 377 LOCK-ON AIR CHUCK (LONG)

Chuck locks on valve when cocked on threads. Has greater air flow and seat cannot be blown out if seal fails. Has 1/4" NPT female thread. Replacement washer 313.

#### 328 LOCK-ON AIR CHUCK (SHORT)

Chuck locks on valve when cocked on threads. Has greater air flow and seat cannot be blown out if seal fails. Has 1/4" NPT female thread.

#### H-4660A CLIP-ON AIR CHUCK

Securely locks onto valve when sleeve is pushed forward, releases when sleeve is pulled back. Has 1/4" NPT female thread.

## 10013 LARGE BORE SCREW-ON CHUCK

Fits 3/8" ID air hose. Screws on to Large Bore valves. Open and close the valve core by turning the knob on top of the chuck.



#### LBTK-1 - LARGE BORE TOOL KIT

Kit contains the 5131, TL-690, H-4660A, N-1910, GA-255S-RCL, 8909-C, N-1710, and N-1810

#### SAFETY!

THESE PRODUCTS, AS WELL AS ALL TIRE TOOLS, SHOULD NEVER BE USED BY PERSONS UNLESS THEY HAVE BEEN TRAINED PROPERLY ACCORDING TO OSHA REGULATION #29CFR 1910.177 ENTITLED "SERVICING SINGLE-PIECE & MULTI-PIECE RIM WHEELS."

## STANDARD BORE AIR CHUCKS

CLIP-ON, LOCK-ON, EUROPEAN-STYLE

#### CH-315 BALL FOOT AIR CHUCK WITH CLIP

3/4" hex, with 1/4" NPT female thread. Heavy-duty spring firmly holds chuck onto valve while inflating tire. Available for use with tire changers. Order CH-315-OP. Uses replacement washer 5565-3.

#### CH-340 LOCK-ON AIR CHUCK

Securely locks onto valve when sleeve is pushed forward. Releases when sleeve is pulled back. 1/4" NPT female thread. Available for use with tire changers. Order CH-340-OP.

#### H-5265

The H-5265 is a specially designed air chuck that locks onto the cap threads of a Standard Bore valve stem when the sliding sleeve is pushed to the forward position. The chuck releases when the sleeve is pulled back. Available for use with tire changers and auto tire inflators. Order H-5265 OP.

#### CH-305

Ball Foot Air Chuck 3/4" hex, brass with 1/4" NPT female thread. Available for use with tire changers and auto tire inflators. Order CH-305-OP.

#### CH-318 CHUCK CLIP

For CH-315 and CH-315-OP.

#### **EUROPEAN-STYLE CLIP-ON AIR CHUCKS**

#### CH-320

Very similar to our N-1200 European-style clip-on air chuck. This is a closed-type chuck and offers the best seal available. Has serrated shank for 1/4" I.D. hose.

#### CH-360

This chuck features the popular European-style clip with a brass 1/4" female fitting. Compact, durable and easy to use, this chuck is available either closed (CH-360) or open (CH-360-OP). Uses replacement washer 10140.

#### CH-360S

Includes all the features of our standard CH-360, with the added benefit of a spring loaded deflector pin. Designed specifically to ensure proper seal closure during multi-tire and nitrogen conversion applications.









CH-360



CH-360S

#### N-1199

Fits 3/16" hose. Hose-open style

#### N-1200

Fits 1/4" I.D. hose-open style.





N-1200



## STANDARD BORE AIR CHUCKS

**DUAL FOOT, LOCK ON** 



#### CH-300

The Haltec CH-300 Lock-On Air Chuck with a small head design makes for easy access to hard-to-reach valves on inside dual wheels. The extended head design improves the lock-on feature. Has 1/4" NPT female threads



#### CH-330-LO DUAL FOOT AIR CHUCKS

Straight-on  $30^\circ$  reverse angle chuck. Available with the lock-on feature. Has 1/4" NPT female thread. 6" long.

CH-330 Dual Foot Air Chucks: Same as CH-330-LO (above) except without lock-on feature.



#### CH-333-LO

Similar to CH-330-LO but with extra long length of 14".



#### CH-335 DUAL FOOT AIR CHUCK

Dual foot for hard-to-reach tractor, dual wheel trucks and bus tires. 1/4" NPT female threads. For standard air line service. 6" long.



#### CH-345 REVERSE ANGLE LOCK-ON CHUCK

Reverse angle lock-on chuck allows easy access to outer dual valve. Also available in open version.



#### CH-346 LONG REACH STRAIGHT LOCK-ON CHUCK

Long reach straight lock-on chuck allows for easy access to inner dual valve. Also available in open version.

## STANDARD BORE AIR CHUCKS

**DUAL FOOT, VALVE CORE TOOLS** 

#### CH-350-LO

A new design offers greater durability and is more user friendly on the straight-on and 30° reverse angle chuck. This 6" -long chuck finished with an attractive black polyurethane coating has 1/4" NPT female threads.



#### CH-355-LO

Similar to CH-350-LO but with extra long length of 14".



#### CH-370-LO

A special air chuck with a straight-on connection and a 180° reverse angle chuck allows easier access to valves located in tight, hard-to-reach places. The CH-370-LO is 6" long and has 1/4" female threads.



#### SURE-LOCK VALVE CORE TOOLS

A special design allows the valve core to stay attached to the tool after it is removed from the valve. A great tool to keep the valve core from getting dropped or lost.

#### SHUR-LOCK VALVE CORE TOOLS

HALTEC NO.	DESCRIPTION	LENGTH
TL-131	Valve Core Tool for Standard Bore Cores	7/8"
TL-132	Valve Core Tool for Cars	2"
TL-133	Valve Core Tool for Trucks	5 1/4"
TL-134	Valve Core Tool for Large Bore Cores	4"





## STANDARD BORE VALVE TOOLS

**VALVE TOOLS** 



#### TL-612 STANDARD BORE CORE TOOL

With an overall length of 8" and oversized handle, the Haltec TL-612 provides a firm grip for inserting and removing valve cores.



#### TL-620 STANDARD BORE CORE TOOL

Plastic handle provides firm grip for inserting and removing valve core.



#### TL-625 STANDARD BORE VALVE CORE TOOL

How many times have you pushed the valve core tool through your pocket? Here's a tool with a recessed probe that fits easily in any pocket.



## TL-630 HEX NUT DRIVER FOR 500 SERIES TRUCK VALVES

Installation tool for tubeless clamp-in metal valves. Accommodates all lengths of tubeless truck valves including the TV-574.



#### TL-632 TRUCK EXTENSION SERVICE TOOL

This tool tightens both metric (European) and domestic type extensions. This tool is broached to engage the metric hex at the extension top and will reach the hex on a 7" U.S.A.-type extension.



#### TL-633 VALVE CAP TOOL

The TL-633 makes it easy to remove and install valve caps on inside dual wheels. Designed for aluminum wheels with small hand holes, it comes with a protective sleeve to prevent scratching. Also works great at removing tight or cross-threaded caps. Positive hold while valve is serviced. Keeps cap in tool. Lengh 8.25" without handle.



#### TL-635 STANDARD BORE VALVE CORE TOOL

Haltec equivalent to Schrader 2688 and Eaton 5406. Tool is made from hex steel, making it very sturdy, yet economical.

TL-665

TL-610

## STANDARD BORE VALVE TOOLS

**VALVE TOOLS** 

#### TL-645 VALVE FISHING TOOL

Combines valve core wrench and deflating pin with flexible cable for fishing valve through rim hole. Available in 24" - TL-645-24



#### TL-650 FISHING TOOL

Guides, aligns and holds valve through valve hole while mounting tire. 10"

#### TL-665 VALVE STEM INSTALLATION TOOL

Rugged tool handles any length valve in any size rim. Screws over valve threads and quickly installs valve into valve hole by appyling pulling pressure.

#### TL-610 STANDARD BORE 4-WAY VALVE TOOL

Repairs and reconditions inside and outside valve threads. Inserts and removes cores. Corrosion-resistant, cadmium-plated.

#### TL-615 STANDARD BORE 2-IN-1 VALVE TOOL

Combination valve core remover and deflator. Corrosion-resistant, cadmiumplated.

#### ASP-1 TUBE STANDARD BORE DEFLATING ASPIRATOR

Creates vacuum by screwing aspirator onto valve mouth and applying air chuck to threaded inlet. Fits Standard Bore valves.

# TL-615 ASP-I

#### VP-CT VALVE PAL CORE REMOVER TOOL

Designed to fit in the tip of "The Original Valve Pal" to reach the inside dual tire stem.



Tool removes and reinstalls standard valve caps



TL-685 CORE INSTALLATION TOOL

VP-CT

## TIRE MANAGEMENT SOLUTIONS



- Increase Fleet Check Speed and Accuracy
- Create Professional Audit Reports
- Generate Instant Real-Time Tire Data
- Optimize Fleet and Tire Performance
- Improve Safety & Legal Compliance
  Insure Quality Inspections
  Analyze Brand Performance

- Track Tire Costs
- Evaluate Fleet Tire Performance
- Track Tire Wear and Defects







## TIRE MANAGEMENT SOLUTIONS





#### **ALLIGATOR**

Reliable, accurate and complete

Haltec has incorporated the Alligator sens.it. TPMS valves into its tire technology management system to provide reliable and accurate tire

- Best vehicle coverage in the industry, with both the 315 mhz and
- Alligator sensors offer a significant reduction in inventory complexity and cost as well as reduced service cycle time and cost
- Features web-based programming and connection capability (via USB port) and a self-updating system for new protocols







**AUTOMATIC TIRE INFLATORS** 

#### **INFLATOR SYSTEMS**

HALTEC NO.	PRODUCT DESCRIPTION
89MXA	Single Tire Automatic Inflator w/Heavy-duty Plastic Housing
89PIU	Portable Single Tire Automatic Inflator
89XDA	Single Tire Automatic Inflator w/Heavy-duty Die Cast Aluminum Enclosure
89XDD	Dual Display Single Tire Automatic Tire Inflator w/Optional External LCD Display
89XDB	High Volume Automatic Tire Inflator w/ ½" Valve Block
89XHB	High Pressure Automatic Tire Inflator w/ 1/2" Valve Block
89XDH	High Pressure Aircraft Tire Automatic Inflator
89XDZ	Heavy-duty Automatic Over Inflator
89XTC	Temperature Compensating Automatic Tire Inflator
89TWIN	Multiple Tire Inflation System, 2 Independent Heads
89-F16*	Low Profile, Mobile Automatic Inflator
890EB	Fully Customizable Automatic Tire Inflation System, Compatible With All 17 Models Listed Above



1/4" inlet/outlet housing, single tire inflation

1/2" inlet/outlet housing, large or multiple tire inflation



#### **TECH TIP**



#### **AUTOMATIC TIRE INFLATOR SYSTEMS**

Automatic Tire Inflator systems – the state-of-the-art Haltec automatic inflators provide a precision tool to maintain properly inflated tires with high speed and accuracy. All 22 Haltec Tire Inflators are designed to provide safe, efficient and accurate tire inflation. Accurate PSI needs to be the primary objective of every tire inflation/service program. The PSI in the tire needs to be accurate and the method of inflation must be simple and fast.

 Haltec custom manufactures each automatic tire inflator for the specific tire inflation needs of our customers.

WEB BASED - BLUETOOTH ENABLED









89XDA INFLATOR 1/4

89MXA INFLATOR 1/4

89XHB INFLATOR 1/2



















89XDB INFLATOR 1/2

**AUTOMATIC TIRE INFLATORS** 



89TRL-6B NITROGEN INFLATOR



## **INFLATOR SYSTEMS**

#### **AUTOMATIC TIRE INFLATORS**

#### **INFLATOR SYSTEMS**

HALTEC NO.	PRODUCT DESCRIPTION
89MTIS-3	Mobile Tire Inflation System, 3 Independent Heads
89MTIS-5	Mobile Tire Inflation System, 5 Independent Heads
89TRL-6B	Mobile Automatic Tire Inflation Trolley
89TRL-6B-IC	Mobile Automatic Tire Inflation Trolley w/Heavy-duty Internal SLA Battery and Charger
89TRL-CYL	Mobile Automatic Tire Inflation Cart w/Supports For Up To 2 Supply Cylinders











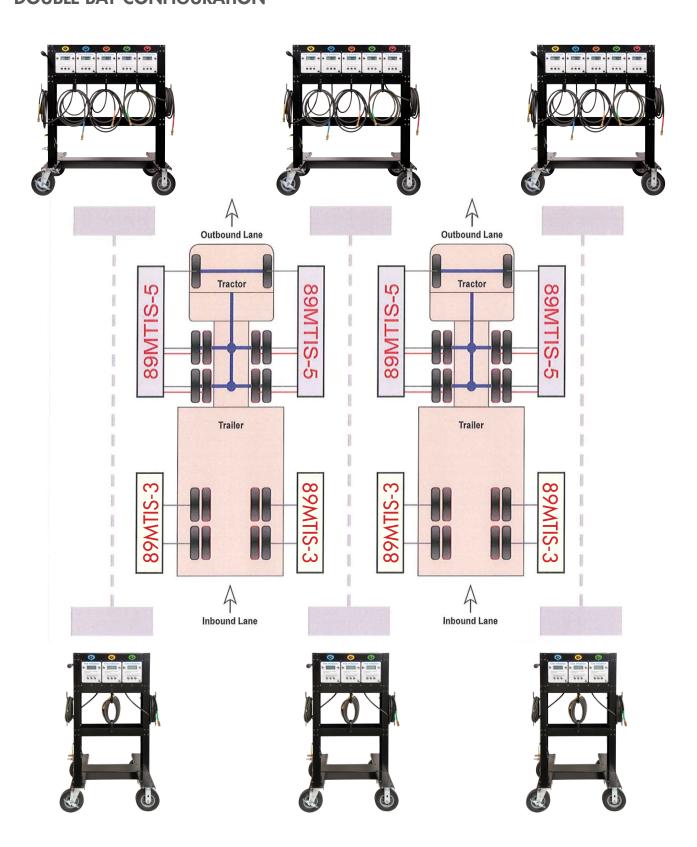
89MTIS-3 MULTIPLE TIRE INFLATION SYSTEM (3WAY)



**AUTOMATIC TIRE INFLATORS** 



#### **DOUBLE BAY CONFIGURATION**





89XDZ

3 PROGRAMMABLE **PSI PRE-SETS** 

**REMOTE START** 

**EMERGENCY DEFLATION** 



89XHB

## INFLATOR SYSTEMS

**AUTOMATIC TIRE INFLATORS** 

#### **INFLATOR SYSTEMS**

HALTEC NO.	PRODUCT DESCRIPTION
89MXA	Single Tire Automatic Inflator w/Heavy-duty Plastic Housing
89PIU	Portable Single Tire Automatic Inflator
89XDA	Single Tire Automatic Inflator w/Heavy-duty Die Cast Aluminum Enclosure
89XDD	Dual Display Single Tire Automatic Tire Inflator w/Optional External LCD Display
89XDB	High Volume Automatic Tire Inflator w/ ½" Valve Block
89XHB	High Pressure Automatic Tire Inflator w/ ½" Valve Block
89XDH	High Pressure Aircraft Tire Automatic Inflator
89XDZ	Heavy-duty Automatic Over Inflator
89XTC	Temperature Compensating Automatic Tire Inflator
89TWIN	Multiple Tire Inflation System, 2 Independent Heads
89MTIS-3	Mobile Tire Inflation System, 3 Independent Heads
89MTIS-5	Mobile Tire Inflation System, 5 Independent Heads
89-F16*	Low Profile, Mobile Automatic Inflator
89TRL-6B	Mobile Automatic Tire Inflation Trolley
89TRL-6B-IC	Mobile Automatic Tire Inflation Trolley w/Heavy-duty Internal SLA Battery and Charger
89TRL-CYL	Mobile Automatic Tire Inflation Cart w/Supports For Up To 2 Supply Cylinders
890EB	Fully Customizable Automatic Tire Inflation System, Compatible With All 17 Models Listed Above

## PRIMARY FEATURES & BENEFITS ON ALL INFLATORS:

- 5 to 145 PSI operating range, adjustable in 1 PSI increments
- Accurate to .3 PSI
- Nitrogen compatible
- 110-volt with 12-volt option
- All weatherproof enclosures; Note The MDA model has a polycarbonate enclosure, all other models have a die-cast aluminum enclosure
- Large, easy to read, backlit, LCD screens
- Capable of setting the bead on a tire when proper operating conditions are met
- All can be private labeled at no additional cost. Minimum order quantity is 50
- Self-calibrate during power up or every 6 minutes

#### DISTINCTIONS TO CONSIDER:

- The 89MXA and 89XDA use a 1/4" inlet and are designed for "Single Tire Inflation."
- Single tire inflation requires an "Open Style" air chuck
- All hose and accessories on the 89MXA and 89XDA can be interchanged.
- When inflating a single tire, the hose length should not exceed 50'
- The 89XDB and 89XDZ use a 1/2" inlet and outlet to allow for greater air flow and the ability to inflate 1-4 tires SIMULTANEOUSLY
- Multiple tire inflation requires a "Closed Style" air chuck (CH-360S).
   A 4-way manifold (89-HMVN) is required for multiple tire inflation
- When inflating multiple tires, the maximum hose length from the manifold is 25' from each of the 4 outlets.
- All hose and accessories on the 89XDB and 89XDZ can be interchanged. When ordering hose for use with manifold, the part number ends with an M.
- Currently Haltec offers hose in red, blue and green.



## INFLATOR SYSTEMS

**AUTOMATIC TIRE INFLATORS** 

#### 89XDA AUTOMATIC TIRE INFLATION SYSTEM; IDEAL FOR: VEHICLE SERVICE CENTERS, AUTO-MOBILE DEALERSHIPS, AND RENTAL FACILITIES

- The heavy-duty, weatherproof and vandal-resistant enclosure of the 89XDA makes it ideal for almost any indoor or outdoor location.
- Inflates or deflates automátically
- Accurate to within .3 PSI
- Self calibrates every 6 minutes
- 1/4" inlet & outlet
- Can be customized to any corporate image & language text
- Maintenance free



## 89MXA AUTOMATIC TIRE INFLATION SYSTEM; IDEAL FOR: TIRE CAGES & TIRE CHANGERS

- Compact design for easy mounting
- Inflates & deflates automatically
- Accurate to within .3 PSI
- Self calibrates every 6 minutes
- 1/4" inlet & outlet
- Maintenance free
- Can be customized to any corporate image
- Indoor use only



## 89XDB INFLATOR; IDEAL FOR: FLEET OPERATIONS, TIRE SERVICE CENTERS AND TIRE MOUNTERS

- Designed specifically for inflating large OTR tires or multiple truck tires
- Indoor or outdoor use
- Inflates 1 to 4 tires simultaneously
- 1/2" inlet maximizes air flow
- Accurate to within .3 PSI



# 89XDZ INFLATOR; IDEAL FOR: RETREAD CENTERS, TIRE SERVICE CENTERS AND TIRE MOUNTERS

- Utilizes 1/2" inlet maximizing air flow Leak detection test
- Equipped with emergency stop control Mutiple purge cycle setting
- Accurate to within .3 PSI Indoor or outdoor use
- Dual LCD screens
- Preset feature stores the 3 most common pressure settings



**AUTOMATIC TIRE INFLATORS** 

# INTRODUCING THE HALTEC EASY LOCKSTIGHTTHE FIRSTTRY!



custom coupler lock with slide release

ES-305 CLOSED ES-306 OPEN 12" extended air chuck, straight



MADE IN AMERICA 1-800-321-6471



#### "EASY LOCK" AIR CHUCK

- Easy on/off application, custom coupler lock with slide release
- Automatic locking-design chuck
- Hardened steel pins for increased service life
- Improves seal on DS-1 flow-through caps
- Extended reach for dual wheels
- Available open or closed



#### **SAFETY!**

WHEN OPERATING DUAL WHEELS, AN INFLATION MISMATCH GREATER THAN 5PSI CREATES SIGNIFICANT DIFFERENCE IN THE CIRCUMFERENCE OF THE TIRES. THE TIRES WILL TRAVEL IN THE SAME DISTANCE IN A SINGLE REVOLUTION: HOWEVER THE LARGER TIRE WILL DRAG THE SMALLER TIRE. THIS PROCESS RESULTS IN CONSIDERABLY GREATER TREAD WEAR ON THE SMALLER TIRE.

DURING TESTING, THE 5PSI DIFFERENTIAL BETWEEN THE DUAL WHEELS, CREATED A 5/16" CIRCUMFERENCE DIFFERENCE BETWEEN THE TIRES. THIS CIRCUMFERENCE DIFFERENCE RESULTS IN THE LARGER TIRE DRAGGING THE SMALLER TIRE 13 FEET IN A SINGLE MILE. OVER THE COURSE OF A TYPICAL 100,000 MILE YEAR THE TIRE IS BEING DRAGGED 246 MILES

PLEASE KEEP IN MIND, THE ABOVE EXAMPLE IS BASED ON A 5PSI DIFFERENTIAL BETWEEN ONE SET OF DUAL TIRES. IMAGINE THE TIRE WEAR RESULTS WHEN, IN MOST CASES, THE PSI DIFFERENCE IS GREATER AND THE FLEET OWNS MULTIPLE SETS OF DUAL WHEELS.

#### 89-SWT-1 NITROGEN SWITCH

Designed to provide standard Haltec Auto Inflators with the ability to top off tires with air or nitrogen.

- Quickly choose between air & nitrogen based on customer needs
- Also available with regulator, tubing and push connect fittings
- Accommodates N2 bottle or on-site N2 generator



89-SWT-1





890EB

#### 890EB (110V OR BATTERY); DESIGNED FOR USE WITH NITROGEN GENERATORS & CUSTOM AIR INDUCTION SYSTEMS

The 890EB Nitrogen inflations kits are specifically designed to inflate, deflate and purge the air out of tires, while automatically re-inflating them to a specific PSI with Nitrogen. The unit can be programmed to automatically complete from 1 to 6 purges. The purpose of the purge cycles is to increase the level of Nitrogen in the tires. The required number of purges depends on the size of the tires, the age of the tires, and the desired Nitrogen purity. The 890EB has a 1/2" inlet and outlet that is capable of servicing up to 4 tires simultaneously. The 89OEB can be incorporated into any nitrogen generation system. Customers recognize that all the benefits of Nitrogen are negated if the tires are not inflated accurately. Current inline inflators and stick gauges cannot provide the .3PSI accuracy of the Haltec Automatic Tire Inflation Systems. The 89OEB kit uses the same hose and product accessories that apply to all single and multiple tire inflation systems.

#### **TECH TIP**

OUR NITROGEN INFLATORS CAN CONVERT ALL 4 TIRES ON YOUR AVERAGE MINI-VAN OR LIGHT TRUCK IN APPROXIMATELY 8-9 MINUTES. PLEASE KEEP IN MIND, THE TECHNICIAN CAN BE COMPLETING OTHER TASKS DURING THIS TIME.

## INFLATOR SYSTEMS

**AUTOMATIC TIRE INFLATORS** 



89-3WTK

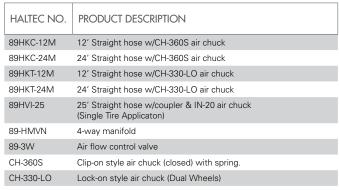


## AUTOMATIC TIRE INFLATION SYSTEM ACCESSORIES FOR 89MXA (RED), 89MDA (GREY) & 89XDA (BLUE) (SINGLE TIRE)

HALTEC NO.	PRODUCT DESCRIPTION
89HKC-12	12' Straight hose w/coupler & CH-360OP air chuck
89HKC-24	24' Straight hose w/coupler & CH-360OP air chuck
89HKC-50	50' Straight hose w/coupler & CH-360OP air chuck
89HKC-25C	25' Blue coil hose w/coupler & CH-360OP air chuck
89HKC-50C	50' Blue coil hose w/coupler & CH-360OP air chuck
89HKT-12	12' Straight hose w/coupler & CH-330 LO-OP air chuck
89HKT-24	24' Straight hose w/coupler & CH-330-LO-OP air chuck
89HKT-50	50' Straight hose w/coupler & CH-330-LO-OP air chuck
89HKI-25	25' Straight hose w/coupler & IN-20 air chuck
89-2 WASV	2-way automatic switching valve (2 hoses)
89-3 WASV	3-way automatic switching valve (3 hoses)
89-3 WTK	3-way automatic switching valve kit (tubing system)
CH-360OP-1	Clip-on style air chuck (open)
CH-330-LO-OP-1	Lock-on style air chuck (Dual Wheels)
IN-20	Core removing & inflation tool (Car)
SVL-STND	Black stand with swivel head for automatic tire inflator

<sup>\*</sup>Custom hose lengths available upon request.

## AUTOMATIC TIRE INFLATION SYSTEM ACCESSORIES FOR 89XDB (YELLOW) & 89XDZ (RED)









IN-20

#### **SAFETY!**

NITROGEN MOLECULES LEAK THROUGH YOUR TIRE 3-4 TIMES SLOWER THAN THE SMALLER OXYGEN MOLECULES. ULTIMATELY, MAINTAINING YOUR VEHICLE'S REQUIRED INFLATION PRESSURE REDUCES TIRE WEAR, INCREASES YOUR FUEL MILEAGE, AND PROVIDES BETTER VEHICLE PERFORMANCE.

### NITROGEN INFLATION ACCESSORIES FOR THE 89XDB-G (GREEN)

	(011==1)
HALTEC NO.	PRODUCT DESCRIPTION
89-3W	Air flow control valve
89-HMVN	4-way manifold
89HVI-25	25' Green hose w/coupler & IN-20 tire chuck (Single Tire Application)
89HVC-12G	12' Green hose w/coupler & CH-360OP-1 clip-on tire chuck (Single tire application)
89HVC-24G	24' Green hose w/coupler & CH-360OP-1 clip-on tire chuck (Single tire application)
89HVC-50G	$50^{\prime}$ Green hose w/coupler & CH-360OP-1 clip-on tire chuck (Single tire application)
89HKC-12MG	12' Green hose w/CH-360S-1 clip-on tire chuck (Multiple tire application)
89HKC-24MG	24' Green hose w/CH-360S-1 clip-on tire chuck (Multiple tire application)
IN-20	Core removal & inflation tire chuck
STAND-4	4' Yellow mounting stand w/square base
A-100-VC-8G	Green valve caps
89TPMS- CAPG	Chrome-plated plastic caps for TPMS valves
NITRO-1	Nitrogen Purity Gauge

- Accurate and easy to use
  Compact and ergonomic in design
  Simple to operate, one button design
  Battery charge indicator
  Auto-power off function
  Replaceable battery and sensor
  Auto diagnostic with error code to simplify troubleshooting



NITRO-1

#### NITROGEN INFLATION ACCESSORIES FOR THE 89TRL

0711KE	
HALTEC NO.	PRODUCT DESCRIPTION
TRL-BAT	Plug & rechargeable Battery
TRL-H-25	25' black hose
TRL-H-IN-20	6" black hose w/IN-20
TRL-H-CH-360OP	6" black hose w/CH-360OP-1
TRL-H-N1200	6" black hose w/small clip on air chuck
TRL-COUP	Silver coupler
IN-20	Core removal & inflation tire chuck
A-100-VC-8G	Green valve caps
NITRO-1	Nitrogen Purity Gauge
89TPMS-CAPG	Chrome-plated plastic caps for TPMS valves





**INFLATORS** 



#### 1-405 INFLATING GAUGE

Meets OSHA Requirements. Inflation unit with in-line gauge. Lightweight aluminum body with brass calibration bar and O-rings seals. Calibrated 10-120 PSI in 2-lb. increments - precise inflation control - 1/4" female NPT inlet with CH-360-OP clip-on air chuck. Also available with hose lengths of 3' or 9'. Specify length when ordering.

#### I-405-LO INFLATING GAUGE

Same as I-405 above except with CH-330-LO lock-on chuck for use on aluminum wheels.

I-405-3LOM

HALTEC NO.	DESCRIPTION	HOSE LENGTH	AIR CHUCK
I-405-3M	Inflator with Clip-on Air Chuck	3'	CH-360-OP
I-405-6M	Inflator with Clip-on Air Chuck	6'	CH-360-OP
I-405-9M	Inflator with Clip-on Air Chuck	9'	CH-360-OP
I-405-12M	Inflator with Clip-on Air Chuck	12'	CH-360-OP
I-405-3LOM	Inflator with Lock-on Air Chuck	3'	CH-330-LO-OP-1
I-405-6LOM	Inflator with Lock-on Air Chuck	6'	CH-330-LO-OP-1
I-405-9LOM	Inflator with Lock-on Air Chuck	9'	CH-330-LO-OP-1
I-405-12LOM	Inflator with Lock-on Air Chuck	12'	CH-330-LO-OP-1



#### I-406M INFLATING GAUGE

Has 12" of hose and CH-335 dual foot air chuck to service small diameter wheels. Gauge is calibrated 10-120 PSI in 2-lb. increments.

#### AIR MASTER DIAL GAUGE

Haltec Air Master Dial Gauge comes in a variety of hose lengths and chuck types to meet the varied needs of the tire professional. The inflator is compact with an ergonomic design that makes the gauge comfortable to operate and easy to use. One button allows the operator to inflate or deflate. the gauge reads from 4 to 140 PSI in 2 pound increments and is also calibrated from 0 to 10 bars in .1 bar increments. The dial gauge is protected with a ribbed rubber shroud.

HALTEC NO.	DESCRIPTION	HOSE LENGTH	AIR CHUCK
I-420	Dial Gauge Inflator	16"	N-1200
I-415-3	Dial Gauge Inflator	3′	CH-360-OP
I-415-6	Dial Gauge Inflator	6′	CH-360-OP
I-415-9	Dial Gauge Inflator	9'	CH-360-OP
I-415-12	Dial Gauge Inflator	12'	CH-360-OP
I-430-3	Dial Gauge Inflator	3′	CH-330-LO-OP-1
I-430-6	Dial Gauge Inflator	6′	CH-330-LO-OP-1
I-430-9	Dial Gauge Inflator	9'	CH-330-LO-OP-1
I-430-12	Dial Gauge Inflator	12'	CH-330-LO-OP-1



#### 1-450 DIGITAL INFLATION GAUGE

Easy to read digital inflation unit calibrated from 0 to 150 PSI in 0.5 PSI increments. Available in a variety of hose lengths and chuck types to meet your needs. Entire body is protected with a rubber cover. The LCD readout is backlit for ease of reading in dark areas and the battery is replaceable.



#### I-6017 INFLATION GAUGE

12" flexible hose with 1/4" NPT inlet and standard bore inflation tip. Precise inflation control, 10-90 lbs. in 2-lb. increments.

- Chrome-plated Body
- Plated Steel Handle
- All brass internal parts
- Solid brass triangular gauge for easier reading



I-6017

1-401

I-402

I-404

I-408

## INFLATOR SYSTEMS

**INFLATORS** 



## I-401 EXTRA HEAVY-DUTY LARGE BORE INFLATOR WITH STRAIGHT CLIP-ON CHUCK

Five-foot Large Bore inflator has 1/2" ball valve with provision for checking air pressure and H-4660A straight lock-on chuck. Rubber hose is 5' long. Inflator has a 3/8" I.D. for maximum air flow. Threaded for 1/2" male NPT hose fittings.

#### 1-400 LARGE BORE INFLATOR

Same as I-401 below except with 10013 Large Bore screw-on chuck.



#### I-402 SERIES SAFETY INFLATOR

Available in 3' and 6' lengths. Has pressure check valve for exact pressure check with your pencil gauge. Has manual bleed valve for adjusting tire pressure and CH-360-OP flow-through clip-on chuck.



#### I-404 HEAVY-DUTY HOSE INFLATOR

Heavy-duty inflator has two separate clip-on chucks with five-foot hoses. One chuck, CH-360, fits Standard Bore valves and the other, H-4660A, Large Bore valves. Has spring-loaded, hand-operated valve and has provisions for checking air pressure during inflation. Threaded for 1/4" male NPT hose fittings.



#### I-408 DUAL TIRE INFLATOR GAUGE

Has five-foot hose to a tee connection, 2' of hose on each side with 12" sliding sleeve, lock-on chuck for easy access to inner dual and dual foot lock-on chuck for outer dual tire. Allows user to engage and disengage chuck quickly. As the same air source serves the unit, both tires are automatically inflated equally. Lock-on chuck fits any standard truck valve stem or the DS-1 double seal cap.



## I-409 LARGE BORE INFLATION GAUGE

Large Bore inflation unit with in-line gauge. Equipped with H-4660A chuck and a 6' hose. Gauge is calibrated 10-120 PSI in 2-lb. increments.

I-409

#### I-350-20

Has 1/2" ball valve with dial gauge for checking pressure. Equipped with safety coupler for releasing the pressure in case of an emergency. 1/2" NPT connection, 3/8" ID for maximum air flow.



#### I-340-20

Has 1/2" ball valve with dial gauge for checking pressure. Equipped with safety coupler for releasing the pressure in case of an emergency. 1/2" NPT connection, 3/8" ID for maximum air flow.



#### I-495-15 IN-95 INFLATOR W/15' HOSE

Safely removes operator away from blast zone by using the 15' hose. Shut-off valve (ball valve) enables operator to stop inflation for proper tire inspection. Includes IN-95 and three additional unions to adapt different sizes, such as SLB, MB & ZB.



#### 10013 LARGE BORE SCREW-ON CHUCK

Fits 3/8" I.D. air hose.



#### **TECH TIP**

THESE PRODUCTS, AS WELL AS ALL TIRE TOOLS, SHOULD NEVER BE USED BY PERSONS UNLESS THEY HAVE BEEN TRAINED PROPERLY ACCORDING TO OSHA REGULATION #29CFR 1910.177 ENTITLED "SERVICING SINGLE-PIECE & MULTI-PIECE RIM WHEELS."



## COUPLERS & NIPPLES

TRU-FLATE, ARO, LINCOLN, INDUSTRIAL

Haltec couplers and nipples are long-lasting, high performance products. They are rated for pressure up to 300 PSI with an operating temperature range of -40° F to +250° F. The 1/4" couplers have a 4-ball locking device while the 3/8" and 1/2" series offer an 8-ball locking device. The nipples have hardened wear points and are made from solid barstock construction to provide long service life. Made in the USA.







CO-103







1/4" TRU-FLATE TYPE

HALTEC NO.	DESCRIPTION	NPT	THREAD TYPE	SCHRADER	DILL	AMFLO	CAMEL	MILTON	TRU-FLATE
CO-101	Coupler	1/4"	Male	3503	D-12	C1	61-524	786	13-124
CO-103	Coupler	1/4"	Female	3504	D-13	C2	61-523	785	13-134
CO-105	Coupler	1/4"	Female	3505	-	C2R	61-487	-	-
NI-102	Nipple	1/4"	Male	3506	D-2C	CP1	61-538	783	12-124
NI-104	Nipple	1/4"	Female	3507	D-3C	CP2	61-539	784	12-134
NI-106	Nipple	fits 302"-	Female	3508	D-6C	CP12	-	779	12-104



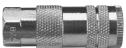
CO-501





1/4" ARO TYPE

HALTEC NO.	DESCRIPTION	NPT	THREAD TYPE	SCHRADER	DILL	AMFLO	CAMEL	MILTON	TRU-FLATE
CO-501	Coupler	1/4"	Female	3526	8888	C38	61-526	775	13-324
NI-502	Nipple	1/4"	Male	3529	8891	CP37	61-528	777	12-325
NI-504	Nipple	1/4"	Female	3530	8889	CP38	61-529	778	12-335











#### 1/4" LINCOLN TYPE

HALTEC NO.	DESCRIPTION	NPT	THREAD TYPE	SCHRADER	DILL	AMFLO	CAMEL	MILTON	TRU-FLATE
CO-701	Coupler	1/4"	Female	3528	123	C28	61-548	790	13-434
NI-702	Nipple	1/4"	Male	3531	126	CP27	61-550	791	12-424
NI-704	Nipple	1/4"	Female	3532	125	CP28	61-551	792	12-434











1/4" INDUSTRIAL TYPE

1/4 11100									
HALTEC NO.	DESCRIPTION	NPT	THREAD TYPE	SCHRADER	DILL	AMFLO	CAMEL	MILTON	TRU-FLATE
NI-202	Nipple	1/4"	Male	5138-11	110	CP21	61-578	727	12-225
CO-301	Coupler*	1/4"	Female	5138-12	-	-	-	-	-
NI-204	Nipple	1/4"	Female	5139-11	109	CP20	61-579	728	12-235
CO-303	Coupler*	1/4"	Male	5139-12	-	-	-	-	-
CO-201	Coupler	1/4"	Female	5142-12	102	C20	61-573	715	13-235

## **COUPLERS & NIPPLES**

INDUSTRIAL, TRU-FLATE, UNIVERSAL







3/8" INDUSTRIAL TYPE

HALTEC NO.	DESCRIPTION	NPT	THREAD TYPE	SCHRADER	DILL	AMFLO	CAMEL	MILTON	TRU-FLATE
CO-204	Coupler	3/8"	Female	3541	117	C26	61-482	1835	13-537
NI-206	Nipple	3/8"	Male	3542	121	CP25	61-484	1837	12-527
NI-208	Nipple	3/8"	Female	3543	122	CP26	61-485	1838	-









3/8" TRU-FLATE TYPE

HALTEC NO.	DESCRIPTION	NPT	THREAD TYPE	SCHRADER	DILL	AMFLO	CAMEL	MILTON	TRU-FLATE
CO-107	Coupler	3/8"	Male	3515	-	C5	61-554	1806	13-107
CO-109	Coupler	3/8"	Female	3516	D-15	C6	61-553	1805	13-613
NI-108	Nipple	3/8"	Male	3517	D-2E	CP5	61-558	1807	12-605
NI-110	Nipple	3/8"	Female	3518	D-3E	CP6	61-559	1808	12-612



CO-111







#### 1/2" TRU-FLATE TYPE

HALTEC NO.	DESCRIPTION	NPT	THREAD TYPE	SCHRADER	DILL	AMFLO	CAMEL	MILTON	TRU-FLATE
CO-111	Coupler	1/2"	Female	3512	D-17	C10	61-563	1815	13-713
CO-111R	Coupler	1/2"	Female	D-17R	C10R	-	-	-	13-712/713
NI-112	Nipple	1/2"	Male	3513	D-2F	CP9	61-568	1817	12-705
NI-113	Nipple	1/2"	Female	-	-	CP18	-	1858	12-762
CO-112	Coupler	1/2"	Male	-	-	-	-	-	-

#### **UNIVERSAL COUPLERS**

HALTEC NO.	DESCRIPTION	NPT	THREAD TYPE	SCHRADER	DILL	AMFLO	CAMEL	MILTON	TRU-FLATE
CO-800	Coupler	1/4" - 18 NPTF	Female	-	-	C60	61-240	-	-
CO-801	Coupler	1/4" - 18 NPTF	Male	-	-	C61	61-241	-	-

#### **FEATURES:**

- The 1/4" universal coupler will accept the industrial interchange [(MIL-C4109) and (ANSI/(NFPA) T3.20.14-1990)] Tru-Flate and the ARO style nipples.
- The coupler features automatic push-to-connect operation, high flow machined "window valve," corrosionresistant, solid-brass construction and
- a sleeve guard which helps prevent accidental disconnects and protects the sleeve from damage.
- While the best quick-coupling performance is obtained by matching like series couplers and nipples, the universal coupler permits multiple series nipples to mate with one coupler.





CO-800

CO-801











5996R / 5996L

5995R / 5995L









#### ALCOA MOUNTING HARDWARE 60° CONE SEAT CAP NUT

Each lug nut has specific inner threads for each application with universal outside threads to accept the Alcoa chrome-plated nut cover (See H-78 & H-79)

## 16" X 7" 1 PC. LUG NUT FOR ALCOA SINGLE STUD PILOT WHEELS

HALTEC NO.	DESCRIPTION	HEX	TORQUE
5012	M12 x 1.5	7/8"	80-90 ft. lbs.
5014	M14 x 1.5	7/8"	100-110 ft. lbs.
5120	1/2 × 20	7/8"	90-100 ft. lbs
5716	7/16 x 20	7/8"	90-100 ft. lbs.
5916	9/16 x 18	7/8"	120-140 ft. lbs.

#### 5996R/5996L

1-1/8" x 16 Cap Nut Mounts standard single wheels and wide base wheels to 1-1/8" studs and provides additional 1/8" hex height. Also mounts outer dualed wheel to 1-1/8" inner cap nut.

#### 5995R/5995L

3/4" x 16 Cap Nut Mounts standard single wheels and wide base wheels to 3/4" studs.

#### 5988R/5988L INNER CAP NUT

For use with standard length studs (1.31" to 1.44" stud standout) or longer studs not to exceed 1.88" stud standout. Full external threads, counter bore 5/16" deep at open end. For use with aluminum inner and outer wheels. Prevents stud from bottoming out in cap nut.

#### 7896R/7896L INNER CAP NUT

Inner thread 3/4" x 16, outer thread 1-1/8" x 16. For use with steel inner dual wheel and aluminum outer dual wheel with 1.31" to 1.44" stud standout.

## 407426 WHEEL INSTALLATION KIT, 4 TOOLS IN A KIT

Alcoa's wheel installation sleeves: Align wheel bolt holes. Seat brake drums that have .980" diameter bolt holes. Prevent thread damage to M22x1.5 studs. Assist in lining up all components for ease of install. For Alcoa wheel with 26mm bolt hole..

#### 39874 - FLANGE NUT

Two-piece, 33mm hex, M22 x1.5mm, RH thread flange nut. Mounts single and dualed wheels to wheel centering hubs. Right hand threads used both sides of vehicle. Single wheels require 2" (50.8mm) stud standout. Dualed wheels require 2-13/16" stud standout.

#### 430632 - CAP NUT

Two-piece, 33mm hex, M22 x1.5mm, RH thread, sleeved cap nut. Mounts single aluminum wheels, with 32mm bolt holes, to wheel centering hubs with stud standouts less than 1.92" (48.75mm). Right-hand threads used on both sides of vehicle.

#### 430732 - CAP NUT

Two-piece, 33mm hex, M22 x1.5mm, RH thread, sleeved cap nut. Mounts dual aluminum wheels, with 32mm bolt holes, to wheel centering hubs with stud standouts less than 2.85" (72mm). Right hand threads used on both sides of vehicle.

#### 2-PIECE FLANGE LUG NUTS OR ALCOA SINGLE & **DUAL HUB-PILOT WHEELS**

	20,1110211101 (/////////////////////////////////						
HALTEC NO.	DESCRIPTION	TORQUE					
2 piece flange lug nuts (for hub pilot 16 x 6 wheels and some 19.5" RV wheels)							
139698	M14 x 1.5, 1 1/16" hex	130-150 ft. lbs.					
139987	9/16" x 18, 1 1/16" hex	130-150 ft. lbs.					
39946	5/8" x 18, 1 1/16" hex	140-160 ft. lbs.					
39913	M14x2.0, 1 1/16" hex	130-150 ft. lbs.					



139987

#### H-1503

10 H-150 Hug-A-Lugs in a cardboard display container. Versatile 10-pack design.

#### H-1813

10 H-181 Hug-A-Lugs in a cardboard display container. Versatile 10-pack design.

Patented spring-clip insert holds cover tight to the nut, yet permits easy installation and removal. Available for ball seal cap nuts for stud located wheels and the new Alcoa Hug-A-Lug® nut cover for the two-piece flange nut for hub-piloted wheels. Now Alcoa Hug-A-Lug nut cover so me in handy cardboard display container for easy retail display. The versatile design of the 10-pack nut covers allows it to stand alone or hang on a display rack.

NOTE: Orders are accepted for less than case quantities.

#### FOR 1 1/2" HEX STUD-PILOT WHEELS

*			
HALTEC NO.	DESCRIPTION	CASE QTY.	FINISH
H-150	For 1 1/2" Hex Stud-pilot Nut	200	Chrome



HALTEC NO.	DESCRIPTION	FOR HEIGHTS	CASE QTY.	FINISH
H-180	For 33mm Hex Flange Nut for buses	.886"-1.0"	200	Chrome
H-181	For 33mm Hex Flange Nut for buses	27-31mm	200	Chrome



HALTEC NO.	DESCRIPTION	FOR HEIGHTS	CASE QTY.	FINISH
H-182	For 1 1/2 Hex Flange Nut for trucks	1 7/16"	200	Chrome
H-183	For 1 1/2 Hex Flange Nut for buses	7/8"	200	Chrome

#### FOR ALOCA LUG NUTS FOR 16" & 19" WHEELS

HALTC NO.	DESCRIPTION	FOR HEIGHTS	CASE QTY.	FINISH
H-78	2.125"	.96"	100	Chrome
H-79	1.525" Tall	.96"	100	Chrome
H-190	Hug-A-Lug Push-On	Fits 1 1/16" nuts	200	Chrome





H-1503

H-1813



H-150



H-180



H-182







## COVER KITS FOR 10-HOLE 22.5" & 24.5" WHEELS









077085

#### COVER KITS FOR 10-HOLE 22.5" & 24.5" WHEELS

COVER KII	3 1 OK 10	-110LE ZZ.3	& Z4.5 WHEELS
HALTEC NO.	WHEEL TYPE	NUT COVER	APPLICATION/PACKAGE
076185*	Hub Piloted	H-185 (33mm)	Cover is secured by screwing the H-185 directly onto stud threads; Box
076155	Ball-Seat	H-155 (1 1/2")	Cover is secured by screwing the H-155 onto inner clamp. Inner clamp is placed on stud threads; Box
076188	Hub Piloted	H-188 (33mm)	Cover is secured by screwing the H-188 onto inner clamp, Inner clamp is placed on stud threads; Box
076085*	Hub Piloted	H-185 (33mm)	Cover is secured by screwing the H-185 directly onto stud threads; Reusable Bin includes 20 nut covers, 2 hub covers & tool
076015	Ball-Seat	H-155 (1 1/2")	Cover is secured by screwing the H-155 onto inner clamp. Inner clamp is placed on stud threads; Reusable Bin includes 20 nut covers, 20 inner clamps, 2 hub covers & tool
076018	Hub Piloted	H-188 (33mm)	Cover is secured by screwing the H-188 onto inner clamp. Inner clamp is placed on stud threads; Reusable Bin includes 20 nut covers, 20 inner clamps, 2 hub covers & tool
077185*	Hub Pilot	H-185 (33mm)	Cover is secured by screwing the H-185 directly onto stud threads; Box
077155	Stud Pilot	H-155 (1 1/2")	Cover is secured by screwing the H-155 onto inner clamp. Inner clamp is placed on stud threads; Box
077188	Hub Pilot	H-188 (33mm)	Cover is secured by screwing the H-188 onto inner clamp, Inner clamp is placed on stud threads; Box
077085*	Hub Pilot	H-185 (33mm)	Cover is secured by screwing the H-185 directly onto stud threads; Reusable Bin includes 40 nut covers, 4 hub covers & tool
077015	Stud Pilot	H-155 (1 1/2")	Cover is secured by screwing the H-155 onto inner clamp. Inner clamp is placed on stud threads; Reusable Bin includes 40 nut covers, 40 inner clamps, 4 hub covers & tool
077018	Hub Pilot	H-188 (33mm)	Cover is secured by screwing the H-188 onto inner clamp. Inner clamp is placed on stud threads; Reusable Bin includes 40 nut covers, 40 inner clamps, 4 hub covers & tool

<sup>\*</sup>Requires a minimum of four threads per stud.

#### H-155

1 1/2" nut cover with an inner clamp and threaded outer cover. To order inner clamp only, ask for Part # H-155C.



#### H-188

33mm nut cover with an inner clamp threaded out cover. To order inner clamp only, ask for Part# H-188C.

#### 500

Installation tool for hub cover systems 076155 and 077155.

#### H-185\*

33mm screw-on nut cover for hub covers 076185 and 077185.

#### 600

Installation tool for hub cover systems 076185, 077185, 076188 and 077188.

- \* Requires a minimum of 4 threads per stud.
- To order Hub Cover Systems in standard cardboard box packaging add a "B" to the end of the part number. Example 077185B







H-155



#### ALCOA'S NEW HUB COVER SYSTEMS: THEY'RE ONE-PIECE WONDERS!

Fits wheels 19.5", 22.5" and 24.5", Hub pilot, 33 mm hex flange nut with  $10 \times 285$  mm. Alcoa's new hub cover system provides an easy way to upgrade the appearance of new and older trucks. This quality-tested, road-proven hub cover system is built to the precise specifications you would expect from Alcoa, the world leader in heavy-duty wheels. This unique, one-piece design provides:

Reduced installation time with 1 part vs. 11

Highly reflective superior finish

- Patented on-off attachment design
- On-off removal for DOT inspection
- 2-year warranty

#### **LIGHT DUTY TRUCKS**

HALTEC NO.	WHEEL SIZE	BOLT CIRCLE	PACKAGE INCLUDES
001102	19.5" x 6" Hub Pilot	8 x 225 mm	1 Front
001103	19.5" x 6" Hub Pilot	8 x 225 mm	1 Rear
110203	19.5" x 6" Hub Pilot	8 x 225 mm	2 Fronts - 2 Rears
100450	19.5 x 6" Hub Pilot	10 x 225 mm	2 Front covers, 2 Rear covers
001004	19.5 x 6" Hub Pilot	10 x 225 mm	1 Front cover
001005	19.5 x 6" Hub Pilot	10 x 225 mm	1 Rear cover

Application: Snaps on over lug nuts and center hub.







087100S 086100S





001103





008222

#### TRUCKS, BUSES AND TRAILERS

HALTEC NO.	DESCRIPTION	BOLT CIRCLE	KIT INCLUDES
082012	Kit for 30mm hex flange nuts (includes fronts and rears)	8 x 275 mm	2-008221, 2-008222, 32-H-20
082122	Front hub cover kit for 33mm hex flange nuts; steers	8 x 275 mm	2-008221, 16 H-22
082133	Rear hub cover kit for 33mm hex flange nuts; drivers	8 x 275 mm	2-008222, 16 H-22
008201	Front Hub Cover for 30mm hex flange nuts	8 x 275 mm	1 Front Hub Cover & 8 lug nut covers (H-20)
008202	Rear Hub Cover for 30mm hex flange nuts	8 x 275 mm	1 Rear Hub Cover & 8 lug nut covers (H-20)
008221	Front Hub Cover for 33mm hex flange nuts	8 x 275 mm	1 Front Hub Cover & 8 lug nut covers (H-22)
008222	Rear Hub Cover for 33mm hex flange nuts	8 x 275 mm	1 Rear Hub Cover & 8 lug nut covers (H-22)
140230B	Front hub cover kit for 30mm hex flange nuts	8 x 275 mm	2-001402, 16-000230
109176B	Rear hub cover kit for 30mm hex flange nuts	8 x 275 mm	2-001109, 16-000230
140233A	Front hub cover kit for 33mm hex flange nuts	8 x 275 mm	2-001402, 16-000233
109176A	Rear hub cover kit for 33mm hex flange nuts	8 x 275 mm	2-001109, 16-000233
001402	Front hub cover for 30mm and 33mm	8 x 275 mm	1-Front cover
001109	Rear hub cover for 30mm and 33mm	8 x 275 mm	1-Rear cover, 1-knob, 1-bracket
000230	Lug nut cover for 30mm hex flange nuts	8 x 275 mm	1-Lug nut cover
000233	Lug nut cover for 33mm hex flange nuts	8 x 275 mm	1-Lug nut cover
001763	Knob for rear hub cover	8 x 275 mm	1-Knob
001834	Bracket for rear hub cover	8 x 275 mm	1-Bracket

Application: Place cover over hub and secure with nut cover.

#### H-20

For 30mm hex flange nuts. \*Requires a minimum of 3 threads protruding through lug nut; Black spacer not applicable with short lug nut.

#### H-22

For 33mm hex flange nuts. \*Requires a minimum of 3 threads protruding through lug nut; Black spacer not applicable with short lug nut.







## HYDRAULIC EQUIPMENT

**BEAD BREAKERS, HYDRAULIC PUMPS** 







OTR-1825









#### BBH-10 "COMBI" BEAD BREAKER

The BBH-10 is ideal for use with all truck, farm tractor, grader, combine, and skidder tires. The air hydraulic movement works on all types of rims except 5-piece earthmover rims. Can be used without removing the wheel and will not damage the bead or rim. No screws, bolts, or attachments. Can be used with Haltec model AHP-20 pump, AHP-15 pump, or equivalent 10,000 PSI pump.

#### TALON-1 OTR BEAD BREAKER

- Works on both front and back wheel without dismounting wheel from vehicle
- Works on all new 3 piece
   25" wheels or larger
- Works on all wheels with CAT "Shur-Lok" safety feature
- A must tool for all trucks

#### **OTR-1825 BEAD BREAKER**

Off-the-road bead breaker tool. Used on 25" to 51" 5-piece rims with pry bar pockets. Has 4 1/4" stroke and is designed to break earthmover tire beads on rusted rims. Can be used with Haltec model AHP-15 pump or equivalent 10,000 PSI pump, 17" length. Caterpillar conversion kit available. Order part OTR-1825CK.

## OTR-2000 GIANT TIRE/WHEEL BEAD BREAKING TOOL

Designed for largest construction and off-road tires and wheels. Works on all 39", 45", 51" and 57" wheel sizes.

Can be used with Haltec model AHP-20 pump, AHP-15 pump, or equivalent 10,000 PSI pump.

Note: Due to design changes, the OTR-2000 frame and ram will not interchange with Goodyear TO-2000 tools. All other parts are interchangeable.

#### **OTR-3000 GIANT TIRE BEAD BREAKER**

- Designed specifically to work on Topy and Rimex OE wheels found on Terex, Komatsu, Liebherr, and Le Tourneau
- Designed to prevent the tool from kicking out while under load

#### AHP-15 HYDRAUIC PUMP

- Fast-acting air hydraulic pump that can be used with all Haltec Bead Breakers
- 10,000 PSI rated
- Capacity 3.5 qts.
- Oil Hose not included
- Polyglass reservoir

#### AHP-20 HYDRAUIC PUMP

- Fast-acting air hydraulic pump that can be used with all Haltec Bead Breakers
- 10,000 PSI rated
- Capacity 5 ats. oil
- Hose not included
- Polyglass reservoir

#### AHP-20H HYDRAULIC HOSE

• 8' hose with coupler for use on all hydraulic pumps.

## HYDRAULIC JACKS, EQUIPMENT

JACKS, RAMS



#### **TECH TIP**

THESE PRODUCTS, AS WELL AS ALL TIRE TOOLS, SHOULD NEVER BE USED BY PERSONS UNLESS THEY HAVE BEEN TRAINED PROPERLY ACCORDING TO OSHA REGULATION #29CFR 1910.177 ENTITLED "SERVICING SINGLE-PIECE & MULTI-PIECE RIM WHEELS."

#### **HYDRAULIC RAMS & JACKS**

These rams are recommended for use in pushing off-rear beads on earthmover wheels. Can be used for all earthmover truck tires. Can also be used as a general purpose cylinder. Maximum operating pressure of 10,000 PSI. Designed for use in all positions. Made in the USA.. A coupler and dust cap are included with all models.

#### **HYDRAULIC RAMS & JACKS**

HALTEC NO.	CYLINDER CAPACITY (TONS)	STROKE (INCHES)	CYLINDER EFFECTIVE AREA (IN2)	OIL CAPACITY (IN3)	COLLAPSED HEIGHT (IN)	WEIGHT (LBS.)
AJ-102	10	2.13	2.23	4.75	4.78	5.1
AJ-106	10	6.13	2.23	13.67	9.75	9.4
AJ-110	10	10.13	2.23	22.59	13.75	12.9
AJ-30	30	2.44	6.5	15.85	4.5	13.8
AJ-506	50	6	11.05	66.3	10.97	31.5
AJ-1006	100	6	20.65	136.91	14.06	45

#### AJ-30

The AJ-30 "shorty" is a lightweight, low-profile design for use in confined places. Cylinder capacity is 30 tons.

#### AJ-506-B

The AJ-506-B 50-ton aluminum jack is easy-to-handle and lightweight, it can be used with any 10,000 PSI pump. Perfect for off-highway work. Comes with a 7" x 7" aluminum base.





AJ-30 AJ-506-B

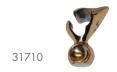
#### AJ-1006 100 TON ALUMINUM JACK

- Lightweight aluminum for easily handling and placing under the
- Includes "Shut-Off Valve" which allows the pump to be removed while ram is extended\*

















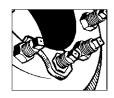












#### 31710 BEAD HOLDING DEVICE

Holds the bead in place against the wheel when mounting the tire onto the wheel. Not a prying device.

#### HANDLED BEAD-BREAKING WEDGES

Use on passenger, truck, bus, farm, tractor, and aircraft tires. Use with soft-face hammers Breaks beads quickly and easily. Handle serves as lever to push bead away from rim.

#### **WEDGES**

PART NO.	EDP NO.	DESCRIPTION	REPLACEMENT HANDLE	LENGTH	HEAD WEIGHT
T11E®	35329	Wood-Handled Wedge	T11EH	30" (76.2cm)	8 1/2 lbs. (3.9kg)
TG11E	35429	Fiberglass Handled Wedge	TG11EH	32" (81.3cm)	8 1/2 lbs. (3.9kg)
TG11D	35427	Fiberglass Handled Wedge	TG11DH	18" (46cm)	4.8 lbs (2.2kg)

#### T26A (32126) BEAD-BREAKING TOOL/ DRIVING IRON

Driving iron is used for loosening rusted truck and bus beads. Tool blade is forged extra wide and curved to fit the rim. Will speed truck repair work and save labor time.

#### **BEAD-BREAKING TOOL/DRIVING IRON**

LENGTH	STOCK	WEIGHT
11 3/4" (29.9cm)	1 1/4" (32mm)	3 3/4 lbs. (1.7kg)

#### BEAD-BREAKING TOOLS TRUCK/FARM/OTR

These lightweight, portable tools are a great alternative to the handled bead breaking wedges or hydraulic bead breakers. One end is used to remove frozen or rusted beads from all types of rims. The other end can be used as a leverage bar when inserted into the 35695 or 35697 Truck Wrench

#### **BEAD-BREAKING TOOLS TRUCK/FARM/OTR**

PART NO.	EDP NO.	DESCRIPTION	LENGTH	STOCK	WEIGHT
T41	33341	Swan Neck	30" (76.2cm)	7/8" (22mm)	5 1/2 lbs. (2.5kg)
T52	34652	Bead Breaker Leverage Bar	33" (83.8cm)	7/8" (22mm)	5 1/2" lbs. (2.5kg)

#### **BUDD NUT WRENCHES**

Wrenches hold outer cap nut on dual wheels while turning inner nut. Lip fits in hole to secure wrench in place. Sizes offered fit standard and metric Budd nuts.

#### **BUDD NUT WRENCHES**

PART NO.	EDP NO.	DESCRIPTION	SIZE	WEIGHT	
TX9®	30609	SAE	1 1/2" (38mm)	.73 lbs (.3kg)	



#### FULL LINE KEN-TOOL CATALOG AVAILABLE UPON REQUEST.

#### **TUBELESS TIRE IRONS & SETS**

Sets provide all irons necessary for a variety of tire changing applications. Use "C" bar with the "B" extension bar for easier use on large, widebase truck tires. Use on standard and large truck tires, including industrial, farm, buses, and tractors.

#### **TUBELESS TIRE IRONS & SETS STANDARD**

PART NO.	EDP NO.	DESCRIPTION	LENGTH	STOCK	WEIGHT
T46A	34747	Straight Mount/ Demount Tool	36" (91.4cm)	3/4" (19cm)	4 1/2 lbs. (2.0kg)



#### **TUBELESS TIRE IRONS & SETS**

PART NO.	EDP NO.	LENGTH	STOCK	WEIGHT
T45A®	34645	37" (94.0cm)	3/4" (19mm)	4.6 lbs. (2.1kg)
T45HD	34647	41" (104.1cm)	7/8" (22mm)	7 lbs. (3.2kg)
T45A-2000K™	34644	37" (94 cm)	3/4" (19mm)	5 lbs. (2.2kg)



#### **TUBELESS TIRE IRONS & SETS HEAVY-DUTY**

PART NO.	EDP NO.	DESCRIPTION	LENGTH	STOCK	WEIGHT
T47A	34847	Straight Mount/ Demount Tool	52" (132.1cm)	1" (25cm)	11 lbs. (5.0kg)







#### LOCK RING TOOLS

These tools are designed to remove lock rings on most trucks on the road today. A must have for anyone mounting or demounting multi-piece rims.

#### **LOCK RING TOOLS**

PART NO.	EDP NO.	DESCRIPTION	LENGTH	STOCK	WEIGHT
T23	32123	Truck Lock Ring Remover Designed especially for Firestone RH and TI rims	24" (61cm)	11/16" (17.5cm)	2 1/4 lbs. (1.0kg)
T23A	33223	Truck Lock Ring Remover Designed Especially for Firestone RH And RI rims	30" (76.2cm)	11/16" (17.5cm)	2 1/2 lbs. (1.1kg)
T23B	33224	Combination Rim/Ring Tool Flat, tapered end ideal for all round ring & rim work	23 1/2" (59.7cm)	11/16" (17.5cm)	2 1/2 lbs. (1.1kg)
T25	32125	5" Rim Lock Tool For Servicing 5" wide base rims	18" (45.7cm)	5/8" (16cm)	1 3/4 lbs. (.8kg)
T27	32127	Special Lock Ring Tool Long, tapered curved end for R-1continuous side rings; short curved end for Goodyear rims	18" (45.7cm)	5/8" (16cm)	1 3/4 lbs. (.8kg)
T27A	32128	Lock Ring Tool Remove continuous side rings on two-piece truck rims	18" (45.7cm)	5/8" (16cm)	1 3/4 lbs. (.8kg)
T48A	34648	Heavy-duty lock ring tool used for multi-piece wheels, especially hub types	37" (94cm)	3/4" (19mm)	4 1/2 lbs. (2.0 kg)



## KEN-TOOL INFLATION CAGES, MOUNT/DEMOUNT SPOONS, WHEEL PROTECTOR



#### TIRE INFLATION CAGES

Mandatory for any shop working with tubeless and multi-piece rims. Made from heavy-gauge steel tubing welded to a steel base. Guards against blown lock rings and rims. Follow safety instructions on cage and OSHA regulation 29-CFR Part 1910.177. Meets OSHA regulation requirements for Medium, Heavy-Duty Truck, OTR, Tractor, and Super Singles. Ken-Tool offers a size and design for all your needs. For additional safety instructions, call Haltec customer service.

#### TIRE INFLATION CAGES

PART NO.	EDP NO.	DESCRIPTION	A HEIGHT	B WIDTH	BASE	WEIGHT
T101	36001	Portable 2-Bar Cage	41" (104cm)	16" (41cm)	7" closed x 21 1/2"	60 lbs. (27.2kg)
T102	36002	4-Bar Cage*	43 1/2" (110.5cm)	20 1/2" (52.1cm)	31 1/2 x 26" (80 x 66.0cm)	152 lbs. (69.0kg)
T104	36004	3-Bar Cage – OTR	65" (165cm)	24" (61cm)	30" x 27" (76cm x 69cm)	158 lbs. (72.6kg)
T105	36005	5-Bar Cage*	43 1/2" (110.5cm)	20 1/2" (52.1cm)	41 x 26" (104.1 x 66.0cm)	192 lbs. (87.2kg)



## 30606 – PROFESSIONAL LUG NUT COVER REMOVER

Special coating will not scratch or damage chrome, painted, or coated lug nut covers.



#### 31810 ALUMINUM WHEEL PROTECTOR

Save expensive rims from damage during manual changing. Prevents tire tools from marring or scratching aluminum or steel rims when using Ken-Tool's manual tire changing tools. Durable leather protector fits on rim and protects inside of the rim well.

31810

#### TIRE MOUNT/DEMOUNT SPOONS

These irons are designed for fast and efficient tire changing. The 30" spoons provide enough strength and leverage to work on large truck, bus, off-road vehicle, tractor, and aircraft tires.

#### TIRE MOUNT/DEMOUNT SPOONS

	*			
PART NO.	EDP NO.	LENGTH	STOCK	WEIGHT
T20A	33220	30" (76.2cm)	11/16" (17.5mm)	3 lbs. (1.4kg)
T39	33239	30" (76.2cm)	7/8" (22mm)	4 1/2 lbs. (2.0kg)
T19A	33219	30"	11/16"	3 lbs.











T20A

#### **SAFETY!**

WARNING: SAFETY CAGES - TIRE CHANGING CAN BE DANGER-OUS AND SHOULD BE DONE BY TRAINED PERSONNEL USING PROPER TOOLS AND EQUIPMENT AS DIRECTED BY FEDERAL OSHA STANDARD NO. 29CFR PART 1910.177. TIRES MAY EXPLODE DURING INFLATION CAUSING INJURY TO OPERATOR OR BYSTANDER. WEAR SAFETY GOGGLES. KEEP ALL PARTS OF BODY OUTSIDE CAGE. USE EXTENSION HOSE, CLIP-ON CHUCK, AND REMOTE VALVE. SEE SUPERVISOR FOR SAFETY PROCEDURES.



#### FULL LINE KEN-TOOL CATALOG AVAILABLE UPON REQUEST.

#### 36014-T114 EZ TIRE ROTATOR FOR INFLATION **CAGES**

- Reduces Back Strain While Handling Large Tire & Wheel Assemblies
- EZ Tire Rotator fits any Ken-Tool 3-Bar, 4-Bar, and 5-Bar Inflation Cage, plus many competitive cages
- No need to lift or remove rim/wheel assembly from cage when
- repositioning valve stem for access through the cage tubes.

   Allows tire tech to easily and quickly rotate rim/wheel assembly inside the safety cage in order to adjust position of valve stems.
- Reduces handling, back strain and user fatigue; increases safety.
  Easily installed or moved to another cage-no fastening required.
- No assembly required; simply place in center of the cage.
- Feature heavy -duty 2" ball-bearing rollers and 1/4" thick steel stock for long service.
- Boxed and UPS shippable.
- Made in the USA.. Patent pending.



MODEL NO.	ITEM NO.	DESCRIPTION	LENGTH	WT.
T114	36014	T114 EZ Tire Rotator	17 1/2" (44.5cm) x 25 1/2"(64.8cm) x 2 1/2" (6.4cm)	19lbs (8.6kg)

#### VALVE BREAKER

Quickly & easily remove valve stem from wheels! Made in the USA from quality, high-grade steel. Heat treated punch for top performance and long life. Pinch-preventing Safety Grip with vibration dampering tube grip. Long-lasting baked powder coat finish. T34B designed to fit into most 30" tool boxes. Simple to re-build - only 3 components.

• Made in the USA from high quality, high grade steel.

- Heat-treated punch for top performance and long life.
- Pinch-preventing Safety Grip with vibration dampening tube grip.
- Long-lasting baked powder coat finish.
- T34B designed to fit onto most 30" toolboxes.
- Simple to rebuild only 3 components.
- Available in two sizes.



#### **VALVE BREAKER**

PART NO.	ITEM NO.	DESCRIPTION	LENGTH	WEIGHT
35934	T34B	Valve Breaker	27"	9lbs.
35936	T36B	Valve Breaker	45"	16lbs.



#### THE BRAND NAME YOU TRUST

- Trust, Racing, Performance, Innovation, Technology, Safety & Rubber
- The most admired company in the motor vehicle parts industry (Fortune Magazine)
- The only tire used by NASCAR and #1 in racing



PREMIUM CONVENTIONAL









670 SERIES

Wiper Blades Are Critical - Your drivers WILL see the difference!

- Your driver's visibility is the single biggest factor in safety
- Vision provides 90% of information needed while driving
- Reduced visibility is the factor in 42% of crashes
- LONG LASTING for clean, clear, no streaks, no smears, no chatter, no noise

Why risk the dollar value of your driver, your tractor/trailer, or your cargo?

GOODYEAR Wiper Blades - The Brand Name You Trust - 100% Made in the USA. Wiper Blade Specifications:

- Clear, perfect, vision
- Designed to perform longer
- Stops smears, streaks, chatter, squeaks
- Heavy-duty steel frame
- Stainless steel flexors
- Natural rubber compound
- Technology leader in the wiper blade industry
- Coverage 11" 28" standard
  Coverage 11" 40" commercial heavy-duty
- Reinforced joints for strength

#### PREMIUM CONVENTIONAL

Heavy-duty steel frame with double paint coat.

- Stainless steel flexors.
- Coverage 11" 28".
- Plus heavy-duty frames.Reinforced joints for strength.
- Natural Rubber Compound.

#### ULTIMATE 765 SERIES

- ResponseEdge Technology™ for wipers.
   SilentArmor Technology™ for wipers.
- OE style and fit with special connectors in addition to hook and side pin coverage.
- Heavy-duty construction.
- Spoiler material designed to repel ice & snow.
- Maximum, all-season, wiping power.

#### Severe weather 758 series

- For Snow / Sleet / Heavy Rain / Mud / High Wind
- Functional spoilers for maximum windshield contact.
- Aerodynamic anti-wind lift.
- Sizes 15" through 28"
- Heavy-duty, riveted steel frame.Stainless steel flexors.
- Natural Rubber Compound.

#### HEAVY-DUTY 717-718 SERIES

- 20" 40" Wiper Blade for Buses, RV's & Older Trucks
- ResponseEdge Technology™ for wipers.
   SilentArmor Technology™ for wipers.
- OE style and fit with special connectors in addition to hook and side pin coverage.
- Heavy-duty construction.
- Spoiler material designed to repel ice & snow.
- Heavy-duty steel frame with double paint coat.
- Stainless steel flexors
- Plus heavy-duty, riveted frames for fleet sizes 20" 40" offering coverage for trucks, buses, and RVs.
- Natural Rubber Compound.

#### STANDARD 670 SERIES

- Riveted frame
- Stainless steel flexors
- Natural Rubber
- Available Sizes: 11" 28"



#### AP-1 BUSCH SUPER SHINE ALUMINUM POLISH

Restores brilliance to dull uncoated aluminum wheels, fuel tanks, trailers, diamond plate, and trim. Can be applied by hand or power buffed. Black residue wipes off easily and washes off hand with soap and water. Provides a long lasting brilliant shine with superior resistance to dulling.

#### AWS-1 BUSCH ALUMINUM WAX & SEALANT

Enhances shine and removes swirl marks while greatly improving corrosion resistance on recently polished aluminum wheels, fuel tanks, and deck plates. Can be left on wheel (unbuffed) in severe weather and road conditions to further protect surface.

#### AWB-1 BUSCH BLUE ALUMINUM WASH

Is the perfect product for cleaning lightly oxidized uncoated aluminum wheels before polishing to a high shine.

## AWHD-1 BUSCH PINK HEAVY-DUTY ALUMINUM

To reduce buffing effort, use Busch Aluminum Wash before polishing with Super Shine Polish.









AWB-1 AP-1 AWS-1 AWHD-1



CONTENTS
0-32051
0-330L51
41 MS-00
57TT26, 33, 50 60 MS-2743
70 MS-7
70 MS-27
80 MS-2743
89-2 WASV76
89-3W76-77
89-3 WASV76 89-3 WTK76
89-3 WTK76 89-F1666-72
89HKC-1276
89HKC-12M76
89HKC-12MG77
89HKC-2476
89HKC-24M76
89HKC-24MG77 89HKC-25C76
89HKC-5076
89HKC-50C76
89HKI-2576
89HKT-1276
89HKT-12M76
89HKT-24
89HKT-50
89-HMVN
89HVC-12G77
89HVC-24G77
89HVC-50G77
89HVI-2576-77
89MTIS-369, 72 89MTIS-569, 72
89MXA 66-67, 72-73
89OEB
89PIU66, 72
89-SWT-175
89TPMS-CAPG50, 77
89TRL-6B
89TRL-CYL
89TWIN
89XDA66-67, 72-73
89XDB 66-67, 72-73
89XDD
89XDH
89XHB 66-67, 72
89XTC66-67, 72
90 MS-2743
114S-5 1/215
1145-1115
115 MS-27
00023087
310
32258
32658
32858
37758 45151
45251
45351
46351
46451
50086
60086
621-546
670 SERIES 04
670 SERIES
670 SERIES

753S-417	7
753S-4 1/217	7
753S-817	7
753S-917	
753S-1017	
753S-11 1/217	/
753S-1217	7
753S-13 1/217	7
753S-1617	
753S-1717	7
753S-17 1/217	7
	7
753S-1817	·
753S-18 1/217	/
<i>75</i> 3S-1917	
753S-20 1/217	7
753S-2117	7
753S-21 1/217	
753S-22 1/217	
7535-22 1/21/	
753S-2317	
753S-23 1/217	
753S-24 1/217	7
753S-2517	
753S-29 1/217	
753S-3217	
758 SERIES94	
765 SERIES94	
810F-818	
810F-918	3
810F-1018	3
810F-11 1/218	
810F-1218	3
810F-13 1/218	2
810F-1618	
810F-1718	3
810F-17 1/218	3
810F-1818	3
810F-18 1/218	3
810F-1918	
810F-20 1/218	
810F-21 1/218	
810F-22 1/218	)
810F-2318	
810F-23 1/218	
810F-24 1/218	
810F-2518	3
810F-29 1/218	3
810F-3218	
810F-4018	
867-1 1/218	
867-1 1/418	
0/70	5
867-218	
867-2 1/218	3
867-2 1/218 867-318	3
867-2 1/218 867-318	3
867-2 1/2	3
867-2 1/2	3 3 3
867-2 1/2       18         867-3       18         867-3 3/8       18         867-4       18         867-4 1/2       18	3 3 3 3
867-2 1/2       18         867-3       18         867-3 3/8       18         867-4       18         867-4 1/2       18         867-5       18	3 3 3 3 3
867-2 1/2       18         867-3       18         867-3 3/8       18         867-4       18         867-4 1/2       18         867-5       18         867-5 9/16       18	3 3 3 3 3 3
867-2 1/2       18         867-3       18         867-3 3/8       18         867-4       18         867-4 1/2       18         867-5       18         867-5 9/16       18         867-6       18	3 3 3 3 3 3 3 3
867-2 1/2       18         867-3       18         867-3 3/8       18         867-4       18         867-4 1/2       18         867-5       18         867-5 9/16       18         867-6       18         867-6 7/8       18	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
867-2 1/2       18         867-3       18         867-3 3/8       18         867-4       18         867-4 1/2       18         867-5       18         867-5 9/16       18         867-6       18         867-6 7/8       18	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
867-2 1/2       18         867-3       18         867-3 3/8       18         867-4       18         867-4 1/2       18         867-5       18         867-5 9/16       18         867-6       18         867-6 7/8       18         867-7 1/4       18	33 33 33 33 33 33 33 33 33 33 33 33 33
867-2 1/2       18         867-3       18         867-3 3/8       18         867-4       18         867-4 1/2       18         867-5       18         867-5 9/16       18         867-6       18         867-6 7/8       18         867-7 1/4       18         867-7 3/4       18	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
867-2 1/2       18         867-3       18         867-3 3/8       18         867-4       18         867-4 1/2       18         867-5       18         867-6       18         867-6 7/8       18         867-7 1/4       18         867-7 3/4       18         867-8       18	
867-2 1/2	
867-2 1/2       18         867-3       18         867-3 3/8       18         867-4       18         867-4 1/2       18         867-5       18         867-5 9/16       18         867-6       18         867-7 1/4       18         867-7 3/4       18         867-8       18         867-8 1/2       18         867-9       18	33 33 33 33 33 33 33 33 33 33 33 33 33
867-2 1/2	33 33 33 33 33 33 33 33 33 33 33 33 33
867-2 1/2       18         867-3       18         867-3 3/8       18         867-4       18         867-4 1/2       18         867-5       18         867-5 9/16       18         867-6       18         867-7 1/4       18         867-7 3/4       18         867-8       18         867-8 1/2       18         867-9       18	33 33 33 33 33 33 33 33 33 33 33 33 33
867-2 1/2       18         867-3       18         867-3 3/8       18         867-4       18         867-4 1/2       18         867-5       18         867-6 9/16       18         867-6 7/8       18         867-7 1/4       18         867-7 3/4       18         867-8 1/2       18         867-9       18         867-10       18         867-10 3/4       18	33 33 33 33 33 33 33 33 33 33 33 33 33
867-2 1/2       18         867-3       18         867-3 3/8       18         867-4       18         867-4 1/2       18         867-5       18         867-5 9/16       18         867-6       18         867-7 1/4       18         867-7 3/4       18         867-8       18         867-9       18         867-10       18         867-10 3/4       18	33 33 33 33 33 33 33 33 33 33 33 33 33
867-2 1/2	33 33 33 33 33 33 33 33 33 33 33 33 33
867-2 1/2	33 33 33 33 33 33 33 33 33 33 33 33 33
867-2 1/2	33 33 33 33 33 33 33 33 33 33 33 33 33
867-2 1/2	33 33 33 33 33 33 33 33 33 33 33 33 33
867-2 1/2	

977S-111 <i>5</i>	
00100487	7
00100587	
00110287	
00110387	
00110987	7
00140287	
00176387	7
00183487	
2755L47	7
500747	7
501284	ļ
501484	
512084	
513156 571684	)
591684	ŀ
5976-551	
5976-651	
5988R / 5988L84	Ĺ
5995R / 5995L84	Ĺ
5996R / 5996L84	Į.
618525	
619025	,
7896R / 7896L84	
00820187	
00820287	7
00822187	7
00822287	
8807N-350	)
8807N-426, 33, 50 8909-C57	,
1000851	
1000951	
1001358, 81	
1005851	
10058B51	
1007151	
1017146	
3060692	
3171090	
3181092	-
3593493	5
3593693 36014-T11493	)
3987484	) I
3991385	
3994685	
07601586	
07601886	
07608586	)
07615586	
07618586	
07618886	
07701586	)
07701886	
07708586	
07708586 07715586	)
07708586 07715586 07718586	
077085       86         077155       86         077185       86         077188       86	)
077085	7
077085	7
077085.       86         077155.       86         077185.       86         077188.       86         082012.       87         082122.       87         082133.       87	,
077085	7
077085.       86         077155.       86         077185.       86         077188.       86         082012.       87         082122.       87         082133.       87         100450.       87	7
077085.       86         077155.       86         077185.       86         077188.       86         082012.       87         082122.       87         082133.       87         100450.       87         109176A       87         109176B       87         110203.       87	7 7 7 7 7 7 7
077085.       86         077155.       86         077185.       86         077188.       86         082012.       87         082122.       87         082133.       87         100450.       87         109176A       87         109176B       87	7 7 7 7 7 7 7
077085.       86         077155.       86         077185.       86         077188.       86         082012.       87         082122.       87         082133.       87         100450.       87         109176A.       87         109176B.       87         110203.       87         125392.       45         126392.       45	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
077085.       86         077155.       86         077185.       86         077188.       86         082012.       87         082122.       87         082133.       87         100450.       87         109176A.       87         110203.       87         1125392.       45         126392.       45         127393.       45	
077085.       86         077155.       86         077185.       86         077188.       86         082012.       87         082122.       87         082133.       87         100450.       87         109176A.       87         109176B.       87         110203.       87         125392.       45         126392.       45	

140233A ......87

225392	45
227392	45
245392	
246392	
247392	
257392	
407426	
430632 430732	84
590900	
590901	
590905	
590911	
590914	65
590915	65
590921	
A-100-VC-1	
A-100-VC-2	50
A-100-VC-3 A-100-VC-8	50
A-100-VC-8G50,	77
A-100-VC-12	
A-126	
A-127	
A-128	51
A-144	50
A-14526,	
A-14738,	
A-148	50
A-14937,	
A-15025, A-151	
A-15229,	
A-15525,	
A-449	
AD-1	50
AHP-15	
AHP-20	
AHP-20H	
AJ-30	
AJ-106	
AJ-110	
AJ-506	
AJ-506-B	
AJ-1006	
ALLIGATORALSP	
AP-1	
AQF-1	
ASP-1	
ASP-10	
AWB-1	95
AWHD-1	
AWS-1	
B-6	
B9-1	
B-22224,	
B050121005	
BBH-10	
BUSCH	95
C-10	12
C-100	
C-134	
C-533	
CH-305	
CH-315	
CH-318	
CH-320	59
CH-330-LO60,	76
CH-330-LO-OP-1 76, 78-	79
CH-335	

## POLICY & WARRANTY

#### POLICY & WARRANTY

#### **PRODUCTS**

Subject to change without notice. Haltec Corporation is not responsible for inadvertent typographical errors or omissions.

No return goods will be accepted unless authorized in writing by Haltec Corporation. All return goods must be shipped prepaid to the factory, and are subject to a restocking charge. Special items are not returnable.

No minimum order is required.

#### WARRANTY

Haltec Corporation, Salem, Ohio, warrants its tire valves and tire valve hardware to be free from defects in workmanship and materials for a period of 60 days from date of shipment from plant. Haltec will replace any item found to be defective, or, at its option, will refund the purchase price of such item, provided that notice of the defect is given by the buyer within 60 days from date of shipment. The foregoing warranty is in lieu of all other warranties, expressed or implied.

#### SAFETY PRECAUTIONS

Tire and Rim Servicing can be dangerous, and should be done by trained personnel using proper tools and procedures. The Occupational Safety and Health Administration has a safety standard for the servicing of single-piece and multi-piece rim wheels (OSHA std 29 CFR 1910.177) to include requirements for the safe servicing of rims used on passenger, truck, trailers, buses and off-road vehicle equipment.

All tire servicing should be performed by persons trained properly. Haltec has copies of this safety standard available upon request. Ask for the standard entitled "Servicing Single-Piece and Multi-Piece Rim Wheels." Failure to comply with these procedures as well as procedures recommended by Tire Manufacturers and Wheel and Rim Manufacturers may result in faulty positioning of the tire and rim and cause the assembly to burst with explosive force sufficient to cause serious physical injury or death. Haltec has developed a list of recommendations relating to the use of our products.

- 1) Prior to any tire work, the valve core should be removed to exhaust all air from the tire/wheel assembly.
- 2) Check the valve system by running a piece of wire through the stem to make sure it is not plugged. Tire/wheel assemblies are known to have contaminants in the assembly (dirt, dust, rust particles, etc.).
- 3) Use only tools which are recommended in the Tire Manufacturers and/or Rim Manufacturers catalog for the type of rim being serviced.
- 4) Use air servicing equipment that allows the person to stand outside the trajectory of the wheel and tire assembly.
- 5) Where a core housing (for tractor or Super Large Bore Valves) is involved, never loosen or attempt to remove the core housing until the air pressure is relieved.
- 6) When servicing an assembly with a core housing valve, use the proper inflation adapter for the intended service (310 Adapter for Tractor Service, CH-3 Core Housing, IN-80A for Super Large Bore, CH-8 or CH-16, Z12 for Z-Bore, MB-8 for Mega Bore, or IN-95 for SLB, Z-Bore and new Mega Bore with removable core housing.).

## INDEX

CH-340		G-20626, 33	, 38	H-798	47	I-405-9LOM	78
CH-345	60	G-550	51	H-1503	85	I-405-9M	78
CH-346	60	GA-100	54	H-1813	8.5	I-405-12LOM	78
CH-350-LO		GA-100DIS		H-2125		I-405-12M	
CH-360		GA-105				I-406M	
CH-360	39			H-2126			
CH-360OP-1		GA-105DIS		H-2127		I-408	
CH-360S5		GA-110M		H-2225		I-409	
CH-370-LO	61	GA-115	54	H-2227	45	I-415-3	
CO-101		GA-115DIS	54	H-2245	45	I-415-6	79
CO-103		GA-120M		H-2246		I-415-9	
CO-105		GA-125		H-2247		I-415-12	70
CO-107		GA-130		H-2248		I-420	
CO-109		GA-135		H-2257		I-430-3	
CO-111	83	GA-135S	53	H-2755	47	I-430-6	79
CO-111R	83	GA-140	53	H-4361	47	I-430-9	79
CO-112	83	GA-145	54	H-4660A	58	I-430-12	
CO-201		GA-146		H-5265		I-450	
CO-204		GA-150		H-6116		I-495-15	
CO-301	82	GA-155		H-6116B		I-6017	
CO-303	82	GA-155S	53	H-7607	47	IN-20	. 76-77
CO-501	82	GA-155S-RCL	53	H-8864	45	IN-80A	
CO-701		GA-160	53	H-8964	45	IN-95	38
CO-800		GA-165		H-27245		LB-216	
						LB-217	
CO-801		GA-165S-RCL		HD-100			
DS-1		GA-170		HD-100-1		LB-218	19
DS-1		GA-175		HD-100-2	15	LB-219	
DS-210	28	GA-185	53	HD-100-3	15	LB-220	19
DS-210P	28	GA-185S-RCL	53	HD-100-4	15	LB-221	19
DS-215	28	GA-185S		HD-100-5	1.5	LB-223	
DS-226		GA-189S-RCL		HD-100-9		LB-224	
DS-296		GA-190		HD-100-10		LB-225	
DS-385		GA-190S		HE-200		LB-226	
DS-390		GA-240		HE-201		LB-227	
DS-400-L		GA-250		HE-202	46	LB-228	
DT-105	55	GA-250S	56	HE-203	46	LB-229	19
DT-150		GA-255		HE-204	46	LB-230	19
E-3100-126, 3		GA-255S		HE-369		LB-231	10
E-3100-4A						LBTK-1	
		GA-255S-RCL		HE-370			
ES-300		GA-274		HE-371		LN-1	
ES-301		GA-276		HE-372		LN-10	
ES-305	74	GA-285	55	HE-373	45	LR-10	
ES-306	74	GA-289	55	HE-381	45	LR-12	39
FCSTBL	45	GA-290	55	HE-382	45	LR-15	39
FE-300	46	GA-300-377	55	HE-383	4.5	LR-16	
FMB-8		GA-850-330		HE-389		LR-20	
FP-134		GA-850-350		HE-390		LR-24	
FP-135		GA-850-370		HE-390A		LR-25	
FP-136	49	GA-850-377S	55	HE-391	45	LR-29	
FP-137	49	GOODYEAR	94	HE-391A	45	LR-33	
FP-138	49	H-20	87	HE-392	45	LR-35	39
FP-139	49	H-22		HE-392A		LR-39	39
FP-140		H-4112		HE-393		LR-45	30
FP-141A		H-42	,	HE-393A		LR-49	
FP-141F		H-43		HE-394		LR-51	
FP-142	49	H-45	17	HE-395		LR-57	39
FP-143	49	H-4716	, 52	HE-396		LR-63	39
FP-144	49	H-47L	16	HE-397	45	LR-69	39
FP-145	49	H-5029	. 48	HE4430		M-1870	29
FP-146		H-78	,	HN-17		M-2000	
FP-153		H-79		HN-18		M-5000	20
FP-154		H-150		HN-21		MB-3	
FP-155		H-155		HN-22		MB-5A	
FP-156		H-180	85	HT-R760		MB-8	
G-160	51	H-181	85	HT-R-761	37	MB-12-75	
G-162	51	H-182	85	HT-Z-100	32	MB-12-85	.35, 37
G-165		H-183		I-340-20		MB-13	
G-166		H-185		I-350-20		MB-14	
						MB-19-75	
G-170		H-188		I-401			
G-170S		H-190		I-402		MB-19-85	
G-172		H-523MS		I-404		MB-20	
G-174	51	H-543C	43	I-405-3LOM	78	MB-20-2	. 37-38
G-201	26	H-556	47	I-405-3M	78	MB-25	
G-2022	6, 33	H-572-0	40	I-405-6LOM	78	MB-26	35
G-20426. 3	,	H-573-0		I-405-6M		MB-27	



M8-29-85   35	MR-20-85	35	OR-333-T	30	S-7910	28	TRL-H-CH-360OP	77
M8-51								
M8-55	MD-50	20						
M8-55-3	AAD 55	20	OR-337-1					
M8-56. 37 CR-397 T 39 SIAND-4. 77 IV-399. 512 M8-60P. 33 CR-451-CVM. 39 T 11E. 90 IV-4000. 52 M8-60P. 33 CR-451-CVM. 39 T 11E. 90 IV-4000. 52 M8-60P. 33 CR-451-CVM. 39 T 11E. 90 IV-4000. 52 M8-60P. 37 CR-457-CVM. 39 T 1780A. 92 IV-401. 52 M8R-65. 37 CR-457-CVM. 39 T 1780A. 92 IV-401. 52 M8R-65. 37 CR-457-CVM. 39 T 1780A. 92 IV-401. 52 M8R-60. 37 CR-457-CVM. 39 T 1780A. 92 IV-401. 52 M8R-60. 27 CR-453-T 39 IV-382. 91 IV-413. 41 M8-800. 27 CR-457-T 39 IV-382. 91 IV-413. 41 M8-850. 27 CR-457-T 39 IV-582. 91 IV-413. 41 M8-859. 27 OR 467-T 39 IV-582. 88 IV-582. 91 IV-414. 41 M8-859. 27 OR 467-T 39 IV-582. 88 IV-582. 91 IV-415. 41 M8-850. 27 CR-457-T 39 IV-582. 88 IV-582. 91 IV-415. 41 M8-850. 28 IV-582. 88 IV-582. 91 IV-416. 41 M7-3000. 24 OIR-3000. 88 IV-77. 91 IV-416/55- 44 M7-3000. 24 OIR-3000. 88 IV-77. 91 IV-416/55- 44 M7-3000. 24 OIR-3000. 88 IV-77. 91 IV-416/55- 44 M7-3000. 28 P 150. 48 IV-59. 49 IV-59. 49 M7-4000. 28 P 150. 49 IV-59. 49 IV-59. 49 M7-4000. 29 P 251. 49 IV-59. 49 IV-59. 49 M7-4000. 40 IV-59. 49 IV-59. 49 M7-4000. 40 IV-59. 49 IV-49. 40 M7-4000. 40 IV-59. 40								
Me-60								
Min-100								
MART. 38 OR 451-T 39 T19A 92 T1-401 52 MRSC6 37 OR 457-VW 39 720A 92 T1-402 52 MRSC1 36 OR 457-T 39 T23A 91 T1-412 41 MRSC80 27 OR 4591 39 T23B 91 T1-412 41 MRSC80 27 OR 4591 39 T23B 91 T1-415 41 MRSC80 27 OR 4591 39 T23B 91 T24B 91 T1-415-C 41 MRSC80 27 OR 4593 39 T23B 91 T24B 91 T1-415-C 41 MRSC80 27 OR 4593 39 T23B 91 T24B 91 T1-415-C 41 MRSC80 27 OR 4593 39 T23B 91 T24B 91 T1-415-C 41 MRSC80 27 OR 4593 39 T23B 91 T24B 91 T1-415-C 41 MRSC80 27 OR 4593 39 T23B 91 T24B 91 T1-415-C 41 MRSC80 27 OR 4593 39 T23B 91 T24B 91 T1-416-C 41 MRSC80 27 OR 4593 49 T25B 91 T1-416-C 41 MRSC80 28 F15 48 T30 48 T1-41B 90 T1-416-C 41 MRSC80 29 T1-5 48 T30 48 T1-41B 90 T1-416-C 41 MRSC80 29 T1-5 49 T39 92 T1-416-C 41 MRSC80 29 T1-5 49 T39 T1-416-C 41 MRSC80 29 T1-5 49 T39 T1-416-C 41 MRSC80 29 T1-5 49 T39 T1-416-C 41 MRSC80 29 T1-41								
MBRC-B 37 OR 457-OWA 39 TZOA 92 TV-402 52 MRS-TIBL 45 OR 453-OWA 39 TZZA 91 TV-412 41 MNCSTIBL 45 OR 453-OWA 39 TZZA 91 TV-413 41 MNCSTIBL 45 OR 463-OWA 39 TZZA 91 TV-413 41 MNCSTIBL 45 OR 463-OWA 39 TZZA 91 TV-413 41 MNCSTIBL 45 OR 463-OWA 39 TZZA 91 TV-413 41 MNCSTIBL 47 OR 463-T 39 TZZB 91 TV-414 41 MNCSTIBL 47 OR 463-T 39 TZZB 91 TV-414 41 MNCSTIBL 47 TZZB 47								
MBYL 36 OR 453°CW 39 123. 9! IV-412. 4.1 MR-5800 27 OR 463°T 39 123. 9! IV-413°CH 4.1 MR-5800 27 OR 4649°T 39 123. 9! IV-413°CH 4.1 MR-5800 27 OR 4649°T 39 125. 9! IV-413°CH 4.1 MR-5800 27 OR 4649°T 39 125. 9! IV-414°CH 4.1 MR-5800 27 OR 4649°T 39 125. 9! IV-414°CH 4.1 MR-5800 27 OR 4649°T 39 125. 9! IV-414°CH 4.1 MR-5800 27 OR 469°T 39 125. 9! IV-414°CH 4.1 MR-5800 28 PF15. 48 1727. 9! IV-416′D5°T 4.1 MR-5800 28 PF15. 48 1730. 48 IV-416. 4.1 MR-5800 28 PF15. 48 1730. 48 IV-416. 4.1 MR-5800 29 PF15. 48 1730. 48 IV-416. 4.1 MR-5800 29 PF15. 49 IV-416′D5°T 4.1 MR-5800 29 PF15. 49 IV-416′D6°T 4.1 MR-5800 29 IV-416′D6°T 4.1 MR-58								
MNCSIBL 45 OR 463-OVM 39 123A 91 IV-413 41 MR-800 27 OR 463-T 39 123B 91 IV-413-CH 41 MR-800 27 OR 469-T 39 125 91 IV-414 41 MR-800 27 OR 469-T 39 125 91 IV-414 41 MR-800 27 OR 469-T 39 125 91 IV-414 41 MR-800 27 OR 469-T 39 125 91 IV-415-CH 41 MR-800 27 OR 469-T 39 125 91 IV-415-CH 41 MR-800 28 P 1-5								
MR-800								
MR-890								
MR-8P0								
MSN44	MR-850	27	OR-469-T	39	T25	91	TV-414	41
MF3000. 24 OIR 3000. 88 TZPA. 91 TV416/DS-1 44 MF3000. 28 P15 48 T30. 48 TV416 41 41 N1000. 48 P250. 49 T39 92 TV4164F. 44 N1000. 48 P250. 49 T39 92 TV4164F. 44 N1000. 48 P250 49 T39 92 TV4164F. 44 N1000. 29 P251. 49 T459. 2000K. 91 TV417 42 N1005. 55 P252 49 T459.2000K. 91 TV418. 41 N1005. 55 P252 49 T459.2000K. 91 TV418. 41 N1005. 49 PC-1 52 T459D. 91 TV418. 41 N1005. 49 PC-1 52 T459D. 91 TV425. 41 N1006. 28 PC-2 52 T469D. 91 TV425. 41 N10091. 49 PC-3 52 T469D. 91 TV425. 41 N1091. 40 PC-3 52 PC-3	MR-890	27	OTR-1825	88	T26A	90	TV-415	41
M-1000	MSN-4	51	OTR-2000	88	T27	91	TV-416	41
N-1000	MT-3000	24	OTR-3000	88	T27A	91	TV-416/DS-1	44
N-1000	MT-4000	28	P-15	48	T-30	48	TV-416L	41
H-10125			P-250	49	T39	92	TV-416LF	44
N-1050   29								
N-1055								
N-1057. 49 PC-1 52 T45HD 91 TV-418-CH. 41 N-1091. 49 PC-3 52 T46A. 91 TV-423. 41 N-1091. 49 PC-3 52 T46A. 91 TV-423. 41 N-1091. 49 PC-5 52 T46A. 91 TV-425. 41 N-1091. 49 PC-5 52 T46A. 91 TV-425. 41 N-1091. 49 PC-5 52 T46A. 91 TV-425. 41 N-1091. 49 PC-5 52 T46A. 91 TV-420. 42 N-1091. 49 PC-5 52 T52 90 TV-500. 40 N-1147. 42 PC-6 52 T88. 23 TV-501. 40 N-1147. 42 PC-7 52 T88. 23 TV-501. 40 N-1147. 42 PC-7 52 T88. 23 TV-501. 40 N-1147. 42 PC-7 52 T88. 23 TV-509. 43 N-1200. 59 PT-45-6 21 T101. 92 TV-510. 43 N-1200. 59 PT-300-450. 21 T102. 92 TV-510. 43 N-1202. 50 PT-330-1490. 21 T105. 92 TV-513. 41 N-1410. 56 PT-330-490. 21 T105. 92 TV-513. 41 N-1410. 56 PT-330-490. 21 T105. 92 TV-513. 41 N-1418. 13 PT-7535-6 21 T-620. 24 TV-542. 43 N-1420H. 56 PTC. 21 T-670. 16 TV-542. 43 N-1420H. 56 PTC. 21 T-670. 16 TV-542. 43 N-1452. 49 PTC BLOCK-OFF CULR 21 T-670. 16 TV-543. 43 N-1452. 49 PTC BLOCK-OFF CULR 21 TC-50. 52 TV-542E. 43 N-1510. 55 PT-670. 21 TC-50. 52 TV-542E. 43 N-1510. 55 PT-670. 21 TC-50. 52 TV-542E. 43 N-1510. 55 PT-670. 21 TC-50. 52 TV-542E. 43 N-1510. 57 PT-670. 21 TC-50. 52 TV-544D. 43 N-1510. 57 PT-700. 49 PT-700.								
N-1066.   28								
N-109								
N-1091-2								
N-1091-3								
N-1147. 42 PC-6 52 T-81. 23 TV-501 40 N-1147. 42 PC-7 552 T-82. 23 TV-509 43 N-1199. 59 PT-45-6 21 T101. 92 TV-510. 43 N-1199. 59 PT-45-6 21 T102. 92 TV-510. 43 N-1202. 50 PT-330-1-650. 21 T102. 92 TV-511. 43 N-1410. 56 PT-330-1-690. 21 T104. 92 TV-513. 41 N-1410. 56 PT-330-1-690. 21 T105. 92 TV-515. 41 N-1410. 56 PT-330-1-690. 21 T105. 92 TV-515. 41 N-1410. 56 PTC. 21 T-670. 16 TV-542. 43 N-1420H. 56 PTC. 21 T-670. 16 TV-543. 43 N-1420H. 55 PTEX. 21 TC-30. 52 TV-5445. 43 N-1452. 49 PT-EX. 21 TC-30. 52 TV-543E. 43 N-1452. 49 PT-EX. 21 TC-40. 52 TV-5444. 43 N-1510. 55 PTEX. P. 21 TC-40. 52 TV-5444. 43 N-1538B. 28 PT-442. 21 TC-60. 52 TV-5444. 43 N-1543. 28 PT-442. 21 TC-60. 52 TV-5445. 43 N-1540. 44 PT-850. 21 TC-60. 52 TV-5445. 43 N-1610. 57 PT-210. 21 TC-60. 52 TV-5446. 43 N-1610. 57 PT-210. 21 TC-60. 52 TV-5455. 43 N-1610. 57 PT-210. 21 TC-60. 52 TV-5455. 43 N-1710. 57 R-372/TR-CH-16 48 TG11E. 90 TV-5455. 43 N-1810. 57 R-372/TR-CH-16 48 TG11E. 90 TV-5466. 43 N-1910. 57 R-520. 22 TG-13. 61 TV-5466. 43 N-1910. 57 R-520. 24-25 TG6-1. 53 TV-5466. 43 N-1910. 57 R-525. 24 TI-133. 61 TV-5466. 43 N-1910. 82 R-520. 25 TI-131. 61 TV-5466. 43 N-1910. 88 R-525. 24 TI-133. 61 TV-5466. 43 N-1910. 89 R-525. 24 TI-134. 61 TV-5466. 43 N-1910. 89 R-525. 24 TI-134. 61 TV-5466. 43 N-1910. 89 R-525. 24 TI-134. 61 TV-5466. 43 N-1910. 89 R-625. 24 TI-134. 61 TV-5466. 43 N-1910. 89 R-625. 24 TI-134. 61 TV-5466. 43 N-1910. 89 R-625. 24 TI-134. 61 TV-5466. 43 N-1904. 89 R-525. 24 TI-134. 61 TV-5466. 43 N-1906. 89 R-5								
N-1147L 42 PC-7 52 T82. 23 TV-500 43 N-1199. 59 PT-45-6 21 T101. 92 TV-510. 43 N-1200. 59 PT-300-1650. 21 T102. 92 TV-511. 43 N-1202. 50 PT-330-31/2 21 T104. 92 TV-511. 43 N-1202. 50 PT-330-1690. 21 T105. 92 TV-513. 41 N-1418. 13 PT-530-1690. 21 T105. 92 TV-515. 41 N-1419. 56 PTC. 21 T670. 16 TV-543. 43 N-1451. 49 PTE BLOCK-OFF COLLAR 21 TALON-1. 88 TV-543D. 43 N-1452. 49 PTE BLOCK-OFF COLLAR 21 TALON-1. 88 TV-543D. 43 N-1510. 55 PTEX-DP. 21 TC-40. 52 TV-544. 43 N-1510. 55 PTEX-DP. 21 TC-40. 52 TV-544. 43 N-1543A. 28 PT-6AUGE. 20-21 TC-50. 52 TV-544D. 43 N-1543A. 28 PT-6AUGE. 20-21 TC-63. 52 TV-544D. 43 N-1600. 44 PTR-520. 21 TC-63. 52 TV-544D. 43 N-1610. 57 PT-710. 21 TC-63. 52 TV-545D. 43 N-1610. 57 PT-710. 21 TC-70. 52 TV-545D. 43 N-1710. 57 R-372. 29 T611D. 90 TV-546. 43 N-1810. 57 R-372/TR-CH-16. 48 TG11E. 90 TV-546. 43 N-1910. 57 R-520. 24-25 TGG-1. 53 N-1910. 57 R-5								
N-1199, 59 PT-45-6 21 T101 92 TV-510 43 N-1200. 59 PT-300-1650. 21 T102 92 TV-511. 43 N-1202. 50 PT-300-31/2 21 T104 92 TV-513. 41 N-1410. 55 PT-300-1650. 21 T105 92 TV-513. 41 N-1410. 55 PT-300-1650. 21 T105 92 TV-515. 41 N-1410. 55 PT-300-1650. 21 T105 92 TV-515. 41 N-1420H 56 PTC 21 T-620 24 TV-542 43 N-1420H 56 PTC 21 T-620 16 TV-543. 43 N-1420H 56 PTC 21 T-670 16 TV-543. 43 N-1452. 49 PTC BLOCK OFF COLLAR 21 TLAION-1 88 TV-54310 43 N-1452. 49 PTEK 21 TC-30. 52 TV-542E 43 N-1510. 55 PTEK.PP 21 TC-40 52 TV-544 43 N-1538B 28 PT GAUGE 20-21 TC-50. 52 TV-544 43 N-1538B 28 PT GAUGE 20-21 TC-50. 52 TV-544 43 N-1640. 55 PTEK.PP 21 TC-60 52 TV-544 53 N-1640. 55 PTEK.PP 21 TC-60 52 TV-544 53 N-1640. 55 PTEK.PP 21 TC-60 52 TV-545 43 N-1640. 57 PT-210. 21 TC-63. 52 TV-545 43 N-1640. 57 PT-210. 21 TC-70. 52 TV-545 43 N-1710. 57 PT-210. 21 TC-70. 52 TV-545 43 N-1710. 57 R-372. 29 TG11D. 90 TV-545E 43 N-1910. 57 R-520. 22 TS-545 A3 N-1910. 57 R-520. 24-25 TGG-1. 53 TV-546-34 N-1910. 57 TV-5460. 43								
N-1200								
N-1202								
N-1410								
N-1418								
N-1420H			PT-330-J-690	21				
N-1451					T-620	24	TV-542	43
N-1452	N-1420H	56	PTC	21	T-670	16	TV-543	43
N-1510	N-1451	49	PTC BLOCK-OFF COL	LAR21	TALON-1	88	TV-543D	43
N-1538B. 28 PT GAUGE 20-21 TC-50 .52 TV-544C .43 N-1543A .28 PTH-42 21 TC-60 52 TV-544D 43 N-1543A .28 PTH-42 21 TC-63 52 TV-544D 43 N-1600 44 PTR-520 21 TC-63 52 TV-545 43 N-1610 57 PT-210 21 TC-70 52 TV-545D 43 N-1610 57 PT-210 21 TC-70 52 TV-545D 43 N-1610 57 PT-210 21 TC-70 52 TV-545D 43 N-1710 57 R-372 29 TG11D 90 TV-546 43 N-1810 57 R-372/TR-CH-16 48 TG11E 90 TV-546 43 N-1910 57 R-520 24-25 TGG-1 53 TV-546-36 43 N-1910 57 R-520 24-25 TG-1 53 TV-546-36 43 N-1910 82 R-520B 25 TL-131 61 TV-546B 43 NL-104 82 R-521 29 TL-132 61 TV-546E 43 NL-106 82 R-525 24 TL-133 61 TV-546G 43 NL-106 82 R-525 24 TL-133 61 TV-546G 43 NL-110 83 R-625 24 TL-134 61 TV-547D 43 NL-110 83 R-625 24 TL-134 61 TV-547D 43 NL-110 83 R-625 24 TL-161 63 TV-552 44 NL-112 83 R-660 24 TL-612 62 TV-553 44 NL-113 83 R-660 24 TL-612 62 TV-553 44 NL-120 82 R-685 24 TL-615 63 TV-553C 44 NL-202 82 R-685 24 TL-625 62 TV-553D 44 NL-204 82 R-760 24 TL-625 62 TV-555D 44 NL-206 83 R-761 38 TL-630 62 TV-555D 44 NL-206 83 R-761 38 TL-630 62 TV-555D 44 NL-506 83 R-761 38 TL-630 62 TV-555D 44 NL-504 82 R-768 24 TL-632 62 TV-555D 44 NL-504 82 R-768 24 TL-634 21 TV-555D 44 NL-504 82 R-768 24 TL-632 62 TV-555D 44 NL-504 82 R-768 24 TL-633 62 TV-555D 44 NL-504 82 R-768 24 TL-635 62 TV-5570 40 NL-704 82 R-768 24 TL-6	N-1452	49	PT-EX	21	TC-30	52	TV-543E	43
N-1543A	N-1510	55	PT-EX-DP	21	TC-40	52	TV-544	43
N-1600. 44 PFR-520 21 TC-63 52 TV-545 43 N-1610 57 PFZ10 21 TC-70 52 TV-545D 43 N-1710 57 R-372 29 TG11D 90 TV-545E 43 N-1810 57 R-372.TR-CH-16 48 TG11E 90 TV-546 43 N-1810 57 R-520 24-25 TGG-1 53 TV-546-36 43 N-1910 57 R-520 24-25 TGG-1 53 TV-546-36 43 NI-102 82 R-520 25 TL-131 61 TV-546D 43 NI-104 82 R-521 29 TL-132 61 TV-546E 43 NI-106 82 R-521 29 TL-133 61 TV-546G 43 NI-108 83 R-625 24 TL-134 61 TV-547D 43 NI-110 83 R-625 24 TL-134 61 TV-547D 43 NI-110 83 R-625 24 TL-610 63 TV-552 44 NI-111 83 R-660 24 TL-612 62 TV-553 44 NI-113 83 R-660 24 TL-612 62 TV-553 44 NI-120 82 R-685 24 TL-616 63 TV-552C 44 NI-202 82 R-685 24 TL-620 62 TV-553D 44 NI-204 82 R-760 24 TL-620 62 TV-553E 44 NI-206 83 R-761 38 TL-630 62 TV-555E 44 NI-206 83 R-761 38 TL-630 62 TV-555E 44 NI-206 83 R-763 24 TL-631 57 TV-555D 44 NI-502 82 R-768 24 TL-631 57 TV-555D 44 NI-504 82 R-768 24 TL-631 57 TV-555E 44 NI-505 82 R-768 24 TL-632 62 TV-555E 44 NI-506 82 R-768 24 TL-633 62 TV-555E 44 NI-507 82 R-769K-1 24 TL-635 62 TV-570 40 NI-700 82 R-769K-1 24 TL-635 62 TV-573 40 NI-701 82 R-969K-1 24 TL-635 62 TV-573 40 NI-704 82 R-969K-1 24 TL-630 57 TV-575 40 NI-704 82 R-969K-1 24 TL-630 57 TV-575	N-1538B	28	PT GAUGE	20-21	TC-50	52	TV-544C	43
N-1600. 44 PFR-520 21 TC-63 52 TV-545 43 N-1610 57 PFZ10 21 TC-70 52 TV-545D 43 N-1710 57 R-372 29 TG11D 90 TV-545E 43 N-1810 57 R-372.TR-CH-16 48 TG11E 90 TV-546 43 N-1810 57 R-520 24-25 TGG-1 53 TV-546-36 43 N-1910 57 R-520 24-25 TGG-1 53 TV-546-36 43 NI-102 82 R-520 25 TL-131 61 TV-546D 43 NI-104 82 R-521 29 TL-132 61 TV-546E 43 NI-106 82 R-521 29 TL-133 61 TV-546G 43 NI-108 83 R-625 24 TL-134 61 TV-547D 43 NI-110 83 R-625 24 TL-134 61 TV-547D 43 NI-110 83 R-625 24 TL-610 63 TV-552 44 NI-111 83 R-660 24 TL-612 62 TV-553 44 NI-113 83 R-660 24 TL-612 62 TV-553 44 NI-120 82 R-685 24 TL-616 63 TV-552C 44 NI-202 82 R-685 24 TL-620 62 TV-553D 44 NI-204 82 R-760 24 TL-620 62 TV-553E 44 NI-206 83 R-761 38 TL-630 62 TV-555E 44 NI-206 83 R-761 38 TL-630 62 TV-555E 44 NI-206 83 R-763 24 TL-631 57 TV-555D 44 NI-502 82 R-768 24 TL-631 57 TV-555D 44 NI-504 82 R-768 24 TL-631 57 TV-555E 44 NI-505 82 R-768 24 TL-632 62 TV-555E 44 NI-506 82 R-768 24 TL-633 62 TV-555E 44 NI-507 82 R-769K-1 24 TL-635 62 TV-570 40 NI-700 82 R-769K-1 24 TL-635 62 TV-573 40 NI-701 82 R-969K-1 24 TL-635 62 TV-573 40 NI-704 82 R-969K-1 24 TL-630 57 TV-575 40 NI-704 82 R-969K-1 24 TL-630 57 TV-575	N-1543A	28	PT-H-42	21	TC-60	52	TV-544D	43
N-1610. 57 PT-Z10 .21 TC-70. 52 TV-545D .43 N-1710. 57 R-372. 29 TG1ID .90 TV-545E .43 N-1710. 57 R-372. 29 TG1ID .90 TV-545E .43 N-1810. 57 R-372/TR-CH-16 .48 TG1IE .90 TV-546 .43 N-1910. 57 R-520. 24-25 TGG-1 .53 TV-546-36 .43 N-1910. 57 R-520. 24-25 TGG-1 .53 TV-546-36 .43 N-1910. 82 R-520B .25 TL-131 .61 TV-546D .43 N-106 .82 R-521 .29 TL-132 .61 TV-546E .43 N-106 .82 R-525 .24 TL-133 .61 TV-546E .43 N-106 .82 R-525 .24 TL-133 .61 TV-546G .43 N-108 .83 R-529 51/4" .24 TL-134 .61 TV-546G .43 N-110 .83 R-625 .24 TL-610 .63 TV-552 .44 N-1112 .83 R-660 .24 TL-610 .63 TV-552 .44 N-1112 .83 R-660 .24 TL-612 .62 TV-553 .44 N-120 .82 R-685 .24 TL-620 .62 TV-553 .44 N-120 .82 R-685 .24 TL-620 .62 TV-553D .44 N-1206 .83 R-760 .24 TL-625 .62 TV-553D .44 N-1206 .83 R-760 .24 TL-625 .62 TV-553D .44 N-1206 .83 R-760 .24 TL-625 .62 TV-553D .44 N-1206 .83 R-761 .38 TL-630 .62 TV-555D .44 N-1208 .83 R-762S .24 TL-631 .57 TV-555D .44 N-1208 .83 R-762S .24 TL-631 .57 TV-555D .44 N-1208 .83 R-762S .24 TL-633 .57 TV-555D .44 N-1500 .82 R-764 .24 TL-633 .62 TV-570 .40 N-1700 .82 R-764 .24 TL-633 .62 TV-570 .40 N-1700 .82 R-764 .24 TL-635 .62 TV-575 .40 N-1700 .82 R-764 .24 TL-635 .62 TV-570 .40 N-1700 .82 R-764 .24 TL-635 .62 TV-570 .40 N-1700 .82 R-764 .24 TL-635 .62 TV-575 .40 N-1700 .82 R-764 .24 TL-635 .63 TV-573 .40 N-1700 .82 R-764 .24 TL-635 .63 TV-573 .40 N-1700 .82 R-764 .24 TL-635 .62 TV-570 .40 N-1700 .82 R-764 .24 TL-635 .63 TV-573 .40 N-1700 .82 R-764 .24 TL-635 .63 TV-573 .40 N-1700 .82 R-764 .24 TL-635 .63 TV-573 .40 N-1700 .82 R-764 .24 TL-630 .57 TV-575 .40 N-1700 .82 R-764 .24 TL-630 .57 TV-575 .40 N-1700 .25 TV-575 .40 N-			PT-R-520	21	TC-63	52	TV-545	43
N-1710. 57 R-372. 29 TG1 ID. 90 TV-545E 43 N-1810. 57 R-372/TR-CH-16 48 TG1 IE 90 TV-546. 43 N-1810. 57 R-520- 24-25 TGG-1 53 TV-546/-36. 43 N-1910. 57 R-520. 24-25 TGG-1 53 TV-546/-36. 43 N-102. 82 R-5208. 25 TL-131 61 TV-546D 43 NI-104. 82 R-521. 29 TL-132 61 TV-546E 43 NI-106. 82 R-525. 24 TL-33 61 TV-546G 43 NI-108. 83 R-529 5 1/4" 24 TL-134 61 TV-546G 43 NI-108. 83 R-625. 24 TL-610 63 TV-552 44 NI-112. 83 R-660. 24 TL-612 62 TV-553 44 NI-113. 83 R-665. 24 TL-615 63 TV-553C 44 NI-113. 83 R-665. 24 TL-615 63 TV-553C 44 NI-120. 82 R-766. 24 TL-625 62 TV-553D 44 NI-204. 82 R-760. 24 TL-625 62 TV-553D 44 NI-206. 83 R-761 38 TL-630 62 TV-555D 44 NI-208. 83 R-762 24 TL-631 57 TV-555D 44 NI-208. 83 R-762 24 TL-633 62 TV-555D 44 NI-209. 82 R-763. 24 TL-633 62 TV-555D 44 NI-500 82 R-764R. 24 TL-633 62 TV-555D 44 NI-500 82 R-764R. 24 TL-633 62 TV-555E 44 NI-500 82 R-764R. 24 TL-633 62 TV-555D 44 NI-500 82 R-764R. 24 TL-633 62 TV-555E 44 NI-500 82 R-764R. 24 TL-633 62 TV-555E 44 NI-500 82 R-764R. 24 TL-633 62 TV-570 40 NI-700 82 R-764R. 24 TL-633 62 TV-570 40 NI-700 82 R-769K-1 24 TL-635 63 TV-573 40 NI-700 82 R-769K-1 24 TL-635 63 TV-573 40 NIRO-1. 77 RK-800 15 TL-645 63 TV-573 40 NRRO-1. 77 RK-800 15 TL-685 63 TV-573 40 NRRO-2. 70 RK-800 15 TL-685 63 T								
N-1810. 57 R-372/TR-CH-16 48 TG1 E 90 TV-546. 43 N-1910. 57 R-520. 24-25 TGG-1 53 TV-546-36 43 N-1910. 57 R-520. 24-25 TGG-1 53 TV-546-36 43 N-1010. 82 R-520. 25 TL-131 61 TV-546E 43 N-104 82 R-521. 29 TL-132 61 TV-546E 43 N-106 82 R-525. 24 TL-133 61 TV-546E 43 N-106 83 R-525 51/4" 24 TL-134 61 TV-546G 43 N-110 83 R-625 24 TL-610 63 TV-552  44 N-110 83 R-625 24 TL-610 63 TV-552 44 N-1112 83 R-660. 24 TL-612 62 TV-553 44 N-1113 83 R-675 24 TL-612 62 TV-553 44 N-1202 82 R-685 24 TL-620 62 TV-553D 44 N-202 82 R-685 24 TL-620 62 TV-553D 44 N-204 82 R-760. 24 TL-625 62 TV-553E 44 N-206 83 R-761 38 TL-630 62 TV-555E 44 N-1208 83 R-762S. 24 TL-631 57 TV-555D 44 N-1502 82 R-763. 24 TL-631 57 TV-555D 44 N-1502 82 R-764R 24 TL-632 62 TV-555E 44 N-1504 82 R-764R 24 TL-632 62 TV-555E 44 N-1504 82 R-764R 24 TL-634 21 TV-571 40 N-1702 82 R-969K-1 24 TL-635 63 TV-572. 40 N-1704 82 R-969K-1 24 TL-635 63 TV-573 40 N-1704 82 R-969K-1 24 TL-635 63 TV-573 40 N-1704 82 R-969K-1 24 TL-635 63 TV-573 40 N-1704 82 R-969K-1 24 TL-635 62 TV-570. 40 N-1704 82 R-969K-1 24 TL-635 63 TV-573 40 OR-21-T 39 RK-830 15 TL-645 63 TV-573-T 40 OR-22-JM 39 RK-810 15 TL-655 63 TV-573-T 40 OR-22-JM 39 RK-830 15 TL-665 63 TV-573-T 40 OR-22-JM 39 RK-830 15 TL-665 57 TV-574- 40 OR-22-JM 39 RK-830 15 TL-665 57 TV-575- 40 OR-22-JM 39 RK-830 15 TL-665 57 TV-575- 40 OR-22-JM 39 RK-830 15 TL-685 57 TV-575- 40 OR-22-TT 39 RK-850 15 TL-685 57 TV-575- 40 OR-22-TT 39 RK-850 15 TL-685 57 TV-575- 40 OR-22-TT 39 RK-850 15 TL-685 57 TV-575- 40 OR-22-TT 39 RK-810 57 TR-BAT 77 TV-618R 48 OR-22-TT 39 SR-58								
N-1910. 57 R-520. 24-25 TGG-1 53 TV-546-36 43 NI-102 82 R-520B. 25 TI-131 61 TV-546D 43 NI-104 82 R-521. 29 TI-132 61 TV-546E 43 NI-106 82 R-525. 24 TI-133 61 TV-546G 43 NI-108 83 R-525 24 TI-133 61 TV-546G 43 NI-108 83 R-529 5 1/4" 24 TI-134 61 TV-547D 43 NI-108 83 R-625 24 TI-130 61 TV-547D 43 NI-110 83 R-625 24 TI-610 63 TV-552 44 NI-112 83 R-660 24 TI-612 62 TV-553 44 NI-113 83 R-675 24 TI-615 63 TV-553C 44 NI-110 82 R-685 24 TI-615 63 TV-553C 44 NI-202 82 R-685 24 TI-620 62 TV-553D 44 NI-204 82 R-760 24 TI-625 62 TV-553D 44 NI-206 83 R-761 38 TI-630 62 TV-553E 44 NI-208 83 R-762S 24 TI-631 57 TV-555D 44 NI-502 82 R-768 24 TI-631 57 TV-555D 44 NI-504 82 R-764R 24 TI-633 62 TV-555D 44 NI-504 82 R-764R 24 TI-633 62 TV-5570 40 NI-702 82 R-969-K 24 TI-634 21 TV-571 40 NI-704 82 R-969-K 24 TI-634 21 TV-571 40 NI-705 82 R-969-K 24 TI-635 62 TV-572 40 NITRO-1 77 RK-800 15 TI-645 63 TV-572-HT 40 NITRO-1 77 RK-800 15 TI-645 63 TV-573 40 OR-22-JM 39 RK-810 15 TI-665 63 TV-575 40 OR-22-JM 39 RK-830 15 TI-685 63 TV-575 40 OR-22-JM 39 RK-830 15 TI-686 57 TV-575- 40 OR-22-JM 39 RK-830 15 TI-686 57 TV-575- 40 OR-22-TI 39 RK-830 15 TI-686 57 TV-575- 40 OR-22-TI 39 RK-830 15 TI-685 57 TV-575- 40 OR-22-TI 39 RK-830 15 TI-685 57 TV-575- 40 OR-22-TI 39 RK-830 15 TI-685 57 TV-575- 40 OR-22-TI 39 RK-830 15 TI-686 57 TV-575- 40 OR-22-TI 39 RK-830 15 TI-685 57 TV-575- 40 OR-22-TI 39 RK-830 15 TI-685 57 TV-575- 40 OR-22-TI 39 RK-830 15 TI-685 57 TV-575- 40 OR-22-TI 39 RK-830 15 TI-686 57 TV-575- 40 OR-22-TI 39 RK-830 15 TI-685 57 TV-575- 40 OR-22-TI 39 RK-830 15 TI-686 57 TV-575- 40 OR-22-TI 39 RK-830 15 TI-686 57 TV-575- 40 OR-22-TI 39 RK-830 15 TI-68								
NI-102								
NI-104 82 R-521 29 TL-132 .61 TV-546E .43 NI-106 82 R-525 24 TL-133 .61 TV-546G .43 NI-108 83 R-529 5 1/4" 24 TL-134 .61 TV-547D .43 NI-110 83 R-529 5 1/4" 24 TL-134 .61 TV-547D .43 NI-110 83 R-625 24 TL-610 .63 TV-552 .44 NI-112 83 R-660 .24 TL-612 .62 TV-553 .44 NI-113 83 R-675 .24 TL-615 .63 TV-553C .44 NI-102 82 R-685 .24 TL-620 .62 TV-553D .44 NI-204 82 R-760 .24 TL-625 .62 TV-553D .44 NI-204 82 R-760 .24 TL-625 .62 TV-553E .44 NI-206 83 R-7625 .24 TL-631 .57 TV-555D .44 NI-502 82 R-763 .24 TL-631 .57 TV-555D .44 NI-502 82 R-763 .24 TL-631 .57 TV-555D .44 NI-504 82 R-764R .24 TL-632 .62 TV-555E .44 NI-504 82 R-764R .24 TL-632 .62 TV-570 .40 NI-704 82 R-969K-1 .24 TL-634 .21 TV-571 .40 NI-704 82 R-969K-1 .24 TL-635 .62 TV-572 .40 NIRO-1 77 R-800 .15 TL-645 .63 TV-573-HT .40 OR-22-JM .39 R-830 .15 TL-645 .63 TV-573-HT .40 OR-22-JM .39 R-830 .15 TL-665 .63 TV-573-HT .40 OR-22-JM .39 R-830 .15 TL-685 .63 TV-573-HT .40 OR-22-JM .39 R-850 .15 TL-665 .63 TV-573-HT .40 OR-22-JM .39 R-850 .15 TL-665 .63 TV-573-HT .40 OR-22-JM .39 R-850 .15 TL-685 .57 TV-575-HP .42 OR-21-T .39 R-850 .15 TL-690 .57 TV-575-HP .42 OR-21-T .39 R-850 .15 TL-690 .57 TV-575-HP .42 OR-22-T .39 R-850 .15 TL-690 .57 TV-575-HP .42 OR-22-T .39 R-800 .15 TL-690 .57 TV-575-HP .42 OR-22-T .39 R-810 .15 TL-690 .57 TV-575-HP .42 OR-22-T .39 R-810 .15 TL-690 .57 TV-575-HP .42 OR-22-T .39 R-810 .51 TR-BAT .77 TV-618R .48 OR-22-T .39 R-81179A .42 TL-N10 .57 TV-618R .48 OR-22-T .39 R-81179A .42 TL-N10 .57 TV-618R .48 OR-22-T .39 R-855 .23 TRL-COUP .77 TV-618R .48								
NI-106								
NI-108								
Ni-110. 83 R-625. 24 TL-610 .63 TV-55244 Ni-112. 83 R-660. 24 TL-612 .62 TV-55344 Ni-113. 83 R-675. 24 TL-615 .63 TV-553C .44 Ni-202. 82 R-685. 24 TL-620 .62 TV-553D .44 Ni-204. 82 R-760. 24 TL-625 .62 TV-553E .44 Ni-206. 83 R-761 .38 TL-630 .62 TV-553E .44 Ni-208. 83 R-762S. 24 TL-631 .57 TV-555D .44 Ni-508. 83 R-762S. 24 TL-631 .57 TV-555D .44 Ni-509. 82 R-763. 24 TL-631 .57 TV-555D .44 Ni-500. 82 R-764R .24 TL-632 .62 TV-555E .44 Ni-504. 82 R-764R .24 TL-633 .62 TV-570 .40 Ni-702. 82 R-969-K .24 TL-633 .62 TV-570 .40 Ni-704. 82 R-969-K .24 TL-635 .62 TV-570 .40 NiTRO-1 .77 RK-800 .15 TL-645 .63 TV-572-HT .40 OR-20-JM .39 RK-810 .15 TL-645 .63 TV-57340 OR-21-T .39 RK-820 .15 TL-645 .63 TV-57340 OR-22-JM .39 RK-830 .15 TL-680 .57 TV-57440 OR-24-JM .39 RK-830 .15 TL-680 .57 TV-57440 OR-25-T .39 RK-850 .15 TL-685 .63 TV-57540 OR-215-H .39 RV-1077A .42 TL-690 .57 TV-575-HP .42 OR-22-TG .39 RV-1077A .42 TL-690 .57 TV-575-HP .42 OR-22-TG .39 RV-1077A .42 TL-800 .25 TV-602-HP .42 OR-22-TG .39 RV-1175A .42 TL-800 .25 TV-618A .48 OR-325-T .39 RV-1177A .42 TL-N-10 .57 TV-618B .48 OR-325-T .39 RV-1177A .42 TR-572-ASC .40 TV-618RB .48 OR-325-T .39 S-85 .23 TRL-COUP .77 TV-618RB .48			R-525	24				
Ni-112								
Ni-113								
NI-202								
NI-204								
NI-206								
NI-208 83 R-762S 24 TL-631 57 TV-555D 44 NI-502 82 R-763 24 TL-632 62 TV-555E 44 NI-504 82 R-764R 24 TL-633 62 TV-570 40 NI-702 82 R-969-K 24 TL-634 21 TV-571 40 NI-704 82 R-969-K 24 TL-635 62 TV-572 40 NITRO-1 77 RK-800 15 TL-645 63 TV-572-HT 40 OR-20-JM 39 RK-810 15 TL-645 63 TV-573 40 OR-21-T 39 RK-820 15 TL-665 63 TV-573-HT 40 OR-22-JM 39 RK-830 15 TL-665 63 TV-573-HT 40 OR-22-JM 39 RK-830 15 TL-665 63 TV-573-HT 40 OR-22-JM 39 RK-840 15 TL-665 63 TV-573-HT 40 OR-24-JM 39 RK-840 15 TL-685 63 TV-575-HP 42 OR-25-T 39 RK-850 15 TL-685 63 TV-575- 40 OR-21-T 39 RK-850 15 TL-685 57 TV-575-HP 42 OR-21-T 39 RK-850 15 TL-690 57 TV-575-HP 42 OR-21-T 39 RV-1077A 42 TL-695 57 TV-575-HP 42 OR-21-T 39 RV-1175A 42 TL-695 57 TV-575-HP 42 OR-21-T 39 RV-1175A 42 TL-695 57 TV-575-HP 42 OR-22-TG 39 RV-1177A 42 TL-800 25 TV-602-HP 42 OR-22-TG 39 RV-1177A 42 TL-800 25 TV-602-HP 42 OR-22-TG 39 RV-1177A 42 TL-800 57 TV-618R 48 OR-321-T 39 RV-1179A 42 TR-572-ASC 40 TV-618R-SS 48 OR-321-T 39 RV-1179A 42 TR-572-ASC 40 TV-618R-SS 48 OR-321-T 39 RV-1179A 42 TR-572-ASC 40 TV-618R-SS 48 OR-325-T 39 S-85 23 TRL-COUP 77 TV-618RB 48								
NI-502								
NI-504	NI-208	83	R-762S	24	TL-631	57	TV-555D	44
NI-702	NI-502	82	R-763	24	TL-632	62	TV-555E	44
NI-704	NI-504	82	R-764R	24	TL-633	62	TV-570	40
NITRO-1 77 RK-800 15 TL-645 63 TV-572-HT 40 OR-20-JM 39 RK-810 15 TL-650 63 TV-573 40 OR-21-T 39 RK-820 15 TL-665 63 TV-573-HT 40 OR-22-JM 39 RK-830 15 TL-665 63 TV-573-HT 40 OR-24-JM 39 RK-830 15 TL-680 57 TV-574 40 OR-24-JM 39 RK-840 15 TL-685 63 TV-575 40 OR-25-T 39 RK-850 15 TL-685 63 TV-575-HP 42 OR-21-T 39 RV-1077A 42 TL-690 57 TV-575-HP 42 OR-21-L 39 RV-1077A 42 TL-695 57 TV-575-HP/DS-1 44 OR-217-L 39 RV-1078A 42 TL-700 37 TV-600-HP 42 OR-220-TG 39 RV-1175A 42 TL-800 25 TV-602-HP 42 OR-224-TG 39 RV-1177A 42 TL-800 25 TV-602-HP 42 OR-225-T 39 RV-1177A 42 TL-101 57 TV-618A 48 OR-225-T 39 RV-1179A 42 TR-572-ASC 40 TV-618A-SS 48 OR-321-T 39 RV-13 51 TRL-BAT 77 TV-618B 48	NI-702	82	R-969-K	24	TL-634	21	TV-571	40
OR-20-JM         39         RK-810         15         TL-650         63         TV-573         40           OR-21-T         39         RK-820         15         TL-665         63         TV-573-HT         40           OR-22-JM         39         RK-830         15         TL-680         57         TV-574         40           OR-24-JM         39         RK-840         15         TL-685         63         TV-575         40           OR-25-T         39         RK-850         15         TL-690         57         TV-575-HP         42           OR-215-H         39         RV-1077A         42         TL-695         57         TV-575HP/DS-1         44           OR-217-L         39         RV-1078A         42         TL-700         37         TV-600-HP         42           OR-220-TG         39         RV-1175A         42         TL-800         25         TV-602-HP         42           OR-224-TG         39         RV-1177A         42         TL-IN-10         57         TV-618A         48           OR-225-T         39         RV-1179A         42         TR-572-ASC         40         TV-618A-SS         48           OR-321-T	NI-704	82	R-969K-1	24	TL-635	62	TV-572	40
OR-20-JM         39         RK-810         15         TL-650         63         TV-573         40           OR-21-T         39         RK-820         15         TL-665         63         TV-573-HT         40           OR-22-JM         39         RK-830         15         TL-680         57         TV-574         40           OR-24-JM         39         RK-840         15         TL-685         63         TV-575         40           OR-25-T         39         RK-850         15         TL-690         57         TV-575-HP         42           OR-215-H         39         RV-1077A         42         TL-695         57         TV-575HP/DS-1         44           OR-217-L         39         RV-1078A         42         TL-700         37         TV-600-HP         42           OR-220-TG         39         RV-1175A         42         TL-800         25         TV-602-HP         42           OR-224-TG         39         RV-1177A         42         TL-IN-10         57         TV-618A         48           OR-225-T         39         RV-1179A         42         TR-572-ASC         40         TV-618A-SS         48           OR-321-T	NITRO-1	77	RK-800	15			TV-572-HT	40
OR-21-T       39       RK-820       15       TL-665       63       TV-573-HT       40         OR-22-JM       39       RK-830       15       TL-680       57       TV-574       40         OR-24-JM       39       RK-840       15       TL-685       63       TV-575       40         OR-25-T       39       RK-850       15       TL-690       57       TV-575-HP       42         OR-215-H       39       RV-1077A       42       TL-695       57       TV-575HP/DS-1       44         OR-217-L       39       RV-1078A       42       TL-700       37       TV-600-HP       42         OR-220-TG       39       RV-1175A       42       TL-800       25       TV-602-HP       42         OR-224-TG       39       RV-1177A       42       TL-IN-10       57       TV-618A       48         OR-225-T       39       RV-1179A       42       TR-572-ASC       40       TV-618A-SS       48         OR-321-T       39       RW-13       51       TRL-BAT       77       TV-618B       48         OR-325-T       39       S-85       23       TRL-COUP       77       TV-618RB       48			RK-810	15	TL-650	63	TV-573	40
OR-22-JM       39       RK-830       15       TL-680       57       TV-574       40         OR-24-JM       39       RK-840       15       TL-685       63       TV-575       40         OR-25-T       39       RK-850       15       TL-690       57       TV-575-HP       42         OR-215-H       39       RV-1077A       42       TL-695       57       TV-575HP/DS-1       44         OR-217-L       39       RV-1078A       42       TL-700       37       TV-600-HP       42         OR-220-TG       39       RV-1175A       42       TL-800       25       TV-602-HP       42         OR-224-TG       39       RV-1177A       42       TL-IN-10       57       TV-618A       48         OR-225-T       39       RV-1179A       42       TR-572-ASC       40       TV-618A-SS       48         OR-321-T       39       RW-13       51       TRLBAT       77       TV-618B       48         OR-325-T       39       S-85       23       TRL-COUP       77       TV-618RB       48								
OR-24-JM       39       RK-840       15       TL-685       63       TV-575       40         OR-25-T       39       RK-850       15       TL-690       57       TV-575-HP       42         OR-215-H       39       RV-1077A       42       TL-695       57       TV-575HP/DS-1       44         OR-217-L       39       RV-1078A       42       TL-700       37       TV-600-HP       42         OR-220-TG       39       RV-1175A       42       TL-800       25       TV-602-HP       42         OR-224-TG       39       RV-1177A       42       TL-IN-10       57       TV-618A       48         OR-225-T       39       RV-1179A       42       TR-572-ASC       40       TV-618A-SS       48         OR-321-T       39       RW-13       51       TRL-BAT       77       TV-618B       48         OR-325-T       39       S-85       23       TRL-COUP       77       TV-618RB       48								
OR-25-T     39     RK-850     15     TL-690     57     TV-575-HP     42       OR-215-H     39     RV-1077A     42     TL-695     57     TV-575HP/DS-1     44       OR-217-L     39     RV-1078A     42     TL-700     37     TV-600-HP     42       OR-220-TG     39     RV-1175A     42     TL-800     25     TV-602-HP     42       OR-224-TG     39     RV-1177A     42     TL-IN-10     57     TV-618A     48       OR-225-T     39     RV-1179A     42     TR-572-ASC     40     TV-618A-SS     48       OR-321-T     39     RW-13     51     TRL-BAT     77     TV-618B     48       OR-325-T     39     S-85     23     TRL-COUP     77     TV-618RB     48								
OR-215-H     39     RV-1077A     42     TL-695     57     TV-575HP/DS-1     44       OR-217-L     39     RV-1078A     42     TL-700     37     TV-600-HP     42       OR-220-TG     39     RV-1175A     42     TL-800     25     TV-602-HP     42       OR-224-TG     39     RV-1177A     42     TL-IN-10     57     TV-618A     48       OR-225-T     39     RV-1179A     42     TR-572-ASC     40     TV-618A-SS     48       OR-321-T     39     RW-13     51     TRL-BAT     77     TV-618B     48       OR-325-T     39     S-85     23     TRL-COUP     77     TV-618RB     48								
OR-217-L     39     RV-1078A     42     TL-700     37     TV-600-HP     42       OR-220-TG     39     RV-1175A     42     TL-800     25     TV-602-HP     42       OR-224-TG     39     RV-1177A     42     TL-IN-10     57     TV-618A     48       OR-225-T     39     RV-1179A     42     TR-572-ASC     40     TV-618A-SS     48       OR-321-T     39     RW-13     51     TRL-BAT     77     TV-618B     48       OR-325-T     39     S-85     23     TRL-COUP     77     TV-618RB     48								
OR-220-TG     39     RV-1175A     .42     TL-800     .25     TV-602-HP     .42       OR-224-TG     39     RV-1177A     .42     TL-IN-10     .57     TV-618A     .48       OR-225-T     39     RV-1179A     .42     TR-572-ASC     .40     TV-618A-SS     .48       OR-321-T     39     RW-13     .51     TRL-BAT     .77     TV-618B     .48       OR-325-T     39     S-85     .23     TRL-COUP     .77     TV-618RB     .48								
OR-224-TG     39     RV-1177A     .42     TL-IN-10     .57     TV-618A     .48       OR-225-T     39     RV-1179A     .42     TR-572-ASC     .40     TV-618A-SS     .48       OR-321-T     39     RW-13     .51     TRL-BAT     .77     TV-618B     .48       OR-325-T     39     S-85     .23     TRL-COUP     .77     TV-618RB     .48								
OR-225-T     39     RV-1179A     .42     TR-572-ASC     .40     TV-618A-SS     .48       OR-321-T     39     RW-13     .51     TRL-BAT     .77     TV-618B     .48       OR-325-T     39     S-85     .23     TRL-COUP     .77     TV-618RB     .48								
OR-321-T     39     RW-13     51     TRL-BAT     .77     TV-618B     .48       OR-325-T     39     S-85     .23     TRL-COUP     .77     TV-618RB     .48								
OR-325-T								
OK-329-1								
	OR-329-1	39	5-85-D	23	IRL-H-25	//	IV-621A	48

## **INDEX**

TV-622A48	WH-46-4 1/2	13
TV-623A48	WH-46-9	13
TV-801-HP42	WH-46-J-651	13
TV-802-HP42	WH-47-4 1/2	
TV-916R48	WH-47-9	13
TV-600842	WH-47-J-652	13
TV-6008C42	WH-48-J-655	13
TV-601041	WH-49-J-654	13
TV-602041	WH-50-6	
TV-603041	WH-50-7 1/2	
TV-604041	WH-50-J-659	
TV-605041	WH-50-J-660	13
TV-CH-148	WH-51-J-668	13
TV-CH-348	WH-52-2	
TX9®90	WH-53-5 1/2	
TYRECHECK64	WH-54-6	
VP-863	WH-55-2 1/2	13
VP-CT63	WH-55-8 1/2	13
W-1101-151	WH-56-3	13
WH-44-613	WH-57-3	13
WH-44-L16	WH-58-2 1/2	13
WH-45-2 1/213	WH-59-J-656	
WH-45-413	WH-70-J-661	14
WH-45-4 1/213	WH-70-J-661-10 1/2	
WH-45-513	WH-70-J-661-25 1/2	14
WH-45-613	WH-70-J-661-28	14
WH-45-7 1/213	WH-70-J-664	
WH-45-813	WH-70-J-664-12 1/2	14
WH-45-913	WH-70-J-667	14
WH-45-1013	WH-71-J-9	14
WH-45-10 1/213	WH-72-J-21 1/4	
WH-45-1213	WH-72-J-28	14
WH-45-1313	WH-73-J-21 1/4	
WH-45-2413	WH-75-J-662	14
WH-45-2813	WH-75-J-662-10 1/2	14
WH-45-29 1/213	WH-75-J-663	14
WH-45-3013	WH-75-J-665	
WH-45-3213	WH-75-J-666	14
WH-45-3613	WH-300-4 1/2	13

WH-300-913
WH-300-J-65013
WH-300-J-65313
WH-300-J-65713
WH-300-J-65813
WH-330-J-69016
WH-330-J-69116
WH-330-J-691B16
WH-330-J-69216
WH-330-J-69316
WH-330-J-69416
WH-330-J-69516
WH-330-J-69616
WHD-0585EC19
WHD-5008EC19
WHD-5922EC19
WHD-7103EC19
WHD-7601EC19
WHD-7602EC19
WHD-7940EC19
WHD-7948EC19
WHD-7949EC19
WHD-9903EC19
WHG-0570VC19
WHG-1450VC19
WHG-4985VC19
WHG-5112VC19
WHG-5200VC19
WHG-5410VC19
WHG-5420VC19
WHG-8018VC19
WHG-8019VC19
WHG-8852VC19
WHG-9440VC19
WHG-9470VC19
WH-JF-99415
Z131
Z231
72-2

Z3-60			 	 		.32
Z3-75			 	 		32
Z3-80			 	 		32
Z3-90			 	 		32
Z4			 	 		31
Z5			 	 		33
Z8						
Z9			 	 		33
Z10			 	 		33
Z12-B.			 	 		33
Z13			 	 		31
Z17			 	 		33
Z55			 	 3	3,	38
Z-100			 	 		33
ZBF-05	81		 	 		32
ZBF-06						
ZBFE-LE	ENGT	Ή.,	 	 		32
ZBR-06	64		 	 		32

#### **POLICY & WARRANTY**

#### **PRODUCTS**

Subject to change without notice. Haltec Corporation is not responsible for inadvertent typographical errors or omissions.

#### RETURNED GOODS

No return goods will be accepted unless authorized in writing by Haltec Corporation. All return goods must be shipped prepaid to the factory, and are subject to a restocking charge. Special items are not returnable.

#### **SHIPMENTS**

No minimum order is required.

#### WARRANTY

Haltec Corporation, Salem, Ohio, warrants its tire valves and tire valve hardware to be free from defects in workmanship and materials for a period of 60 days from date of shipment from plant. Haltec will replace any item found to be defective, or, at its option, will refund the purchase price of such item, provided that notice of the defect is given by the buyer within 60 days from date of shipment. The foregoing warranty is in lieu of all other warranties, expressed or implied.

#### SAFETY PRECAUTIONS

Tire and Rim Servicing can be dangerous, and should be done by trained personnel using proper tools and procedures. The Occupational Safety and Health Administration has a safety standard for the servicing of single-piece and multi-piece rim wheels (OSHA std 29 CFR 1910.177) to include requirements for the safe servicing of rims used on passenger, truck, trailers, buses and off-road vehicle equipment.

All tire servicing should be performed by persons trained properly. Haltec has copies of this safety standard available upon request. Ask for the standard entitled "Servicing Single-Piece and Multi-Piece Rim Wheels." Failure to comply with these procedures as well as procedures recommended by Tire Manufacturers and Wheel and Rim Manufacturers may result in faulty positioning of the tire and rim and cause the assembly to burst with explosive force sufficient to cause serious physical injury or death. Haltec has developed a list of recommendations relating to the use of our products.

- Prior to any tire work, the valve core should be removed to exhaust all air from the tire/wheel assembly.
- 2) Check the valve system by running a piece of wire through the stem to make sure it is not plugged. Tire/wheel assemblies are known to have contaminants in the assembly (dirt, dust, rust particles, etc.).
- Use only tools which are recommended in the Tire Manufacturers and/or Rim Manufacturers catalog for the type of rim being serviced.
- 4) Use air servicing equipment that allows the person to stand outside the trajectory of the wheel and tire assembly.
- 5) Where a core housing (for tractor or Super Large Bore Valves) is involved, never loosen or attempt to remove the core housing until the air pressure is relieved.
- 6) When servicing an assembly with a core housing valve, use the proper inflation adapter for the intended service (310 Adapter for Tractor Service, CH-3 Core Housing, IN-80A for Super Large Bore, CH-8 or CH-16, Z12 for Z-Bore, MB-8 for Mega Bore, or IN-95 for SLB, Z-Bore and new Mega Bore with removable core housing.).



## **HALTEC CORPORATION**

32585 North Price Road PO Box 1180 Salem, OH 44460

p: (330) 222-1501 toll free: (800) 321-6471 f: (330) 222-2302

www.haltec.com