

**MERITOR® TIRE INFLATION
SYSTEM (MTIS) BY PSI™
INCLUDING MERITOR THERMALERT™**

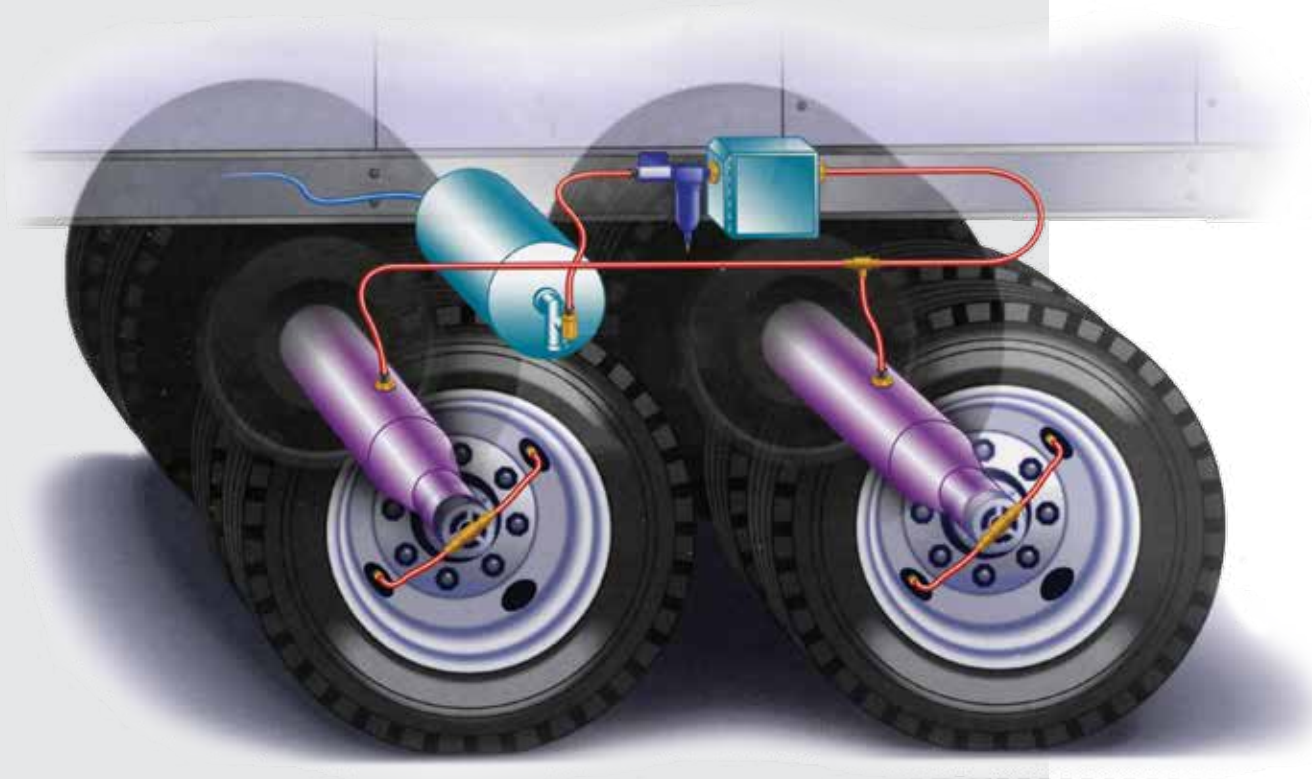
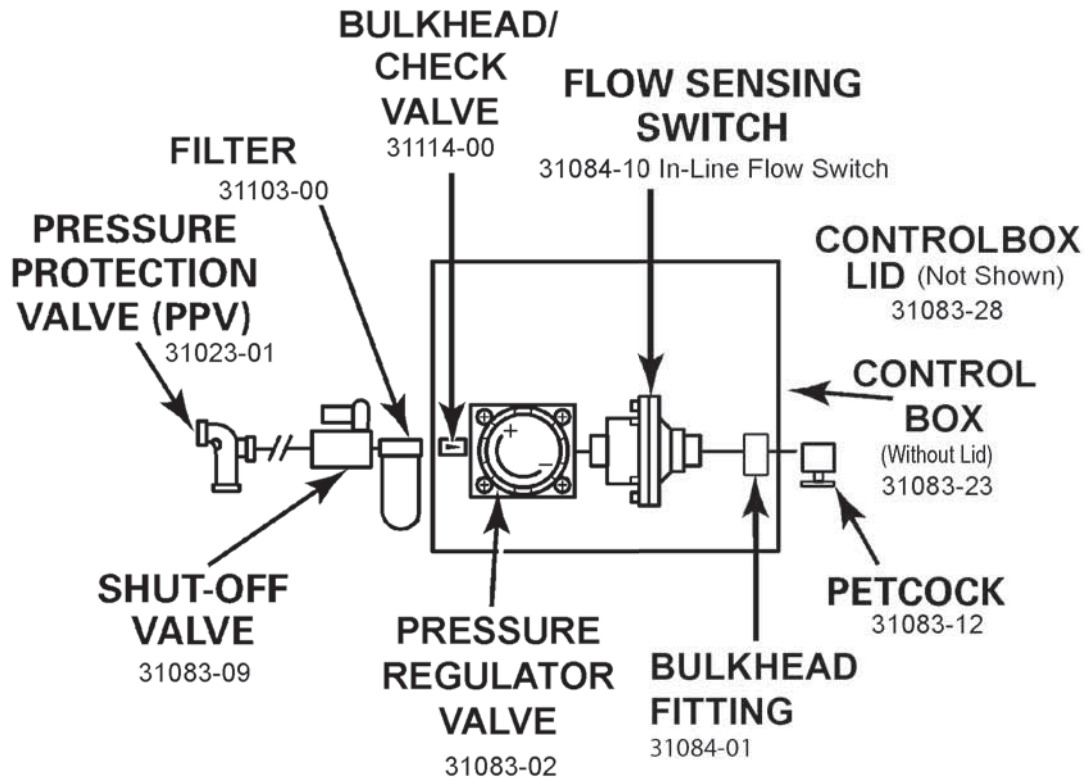


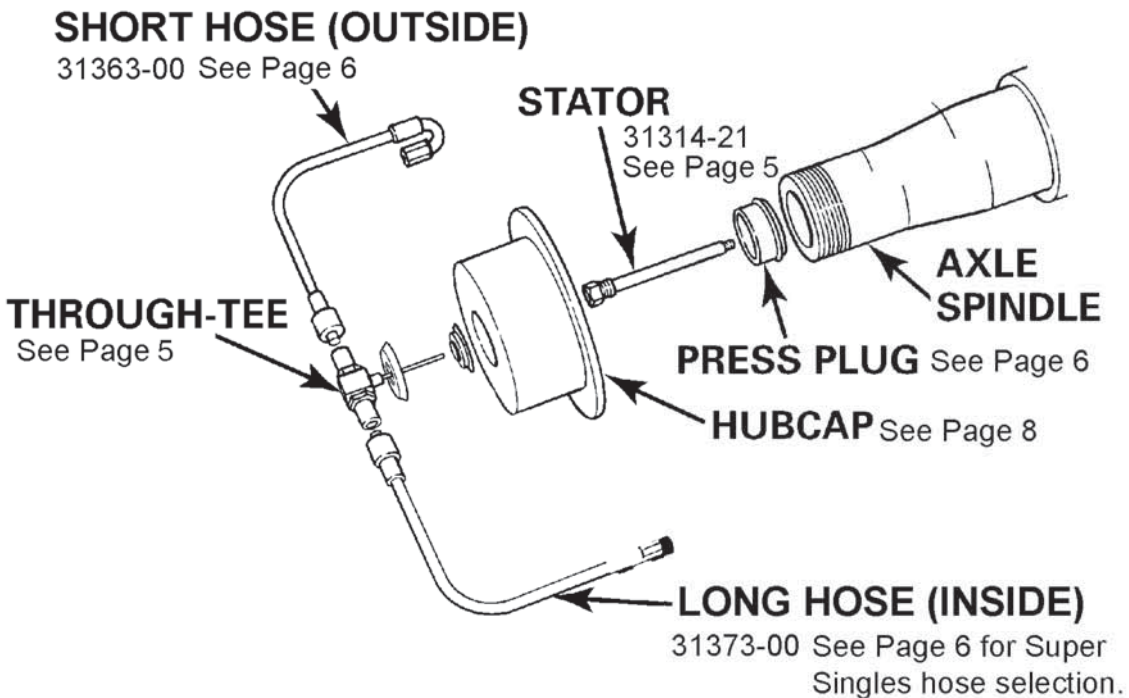
TABLE OF CONTENTS

Control Box	6
Exploded Views	2
Guidelines for Specifying the Correct Kits for the Meritor Tire Inflation System.....	4
Hoses.....	8
Hubcaps	11
Lights	6
Press Plug Kits	9
Retrofit Kit	3
Through-Tees and Stators.....	8
Tools	10
Numerical Parts Listing	12

CONTROL BOX ASSEMBLY



DUAL WHEEL END ASSEMBLY



MERITOR TIRE INFLATION SYSTEM RETROFIT KIT



Qty. Per Tandem Kit	Components	Qty. Per Tandem Kit	Components
1	Control box with lid	4	Stators
1	Control box bracket	4	Press plugs with adhesive and towelettes
Bulk	Air tubing	4	Flex hoses for inside tire
Bulk	Electrical cable	4	Flex hoses for outside tire
Bulk	Nylon tie straps	1	Pressure protection valve
1	Trailer light with hardware	1	Miscellaneous fitting and hardware kit
4	Through-tees with flappers and shields		

How to Specify Retrofit Kits:

1. Determine axle manufacturer and spindle style - straight or tapered. If the axle was MTIS prepped at factory, use MTIS Prepped Kit (less press plugs and stators).
2. Identify wheel size and determine axle count. Use the charts below to select the correct retrofit kit.
3. See Page 8 to select the appropriate style of hubcaps (hubcaps included in full ThermALERT™ kits).
4. Determine hub material - Ductile Iron or Aluminum.

NOTE: All retrofit kits are pre-set to 100psi. Please consult the MTIS Maintenance and Installation Manual (MM14P) for additional details.

Retrofit Kit Series:

Straight Spindle

31955 Series	Holland® ProPar™
31975 Series	Meritor TP, TB (1998 and later), WP, Hendrickson® HP - 2.75"
32405 Series	Meritor TB (before 1998) - 2.95"
32595 Series	Sudisa® 12-R
32815 Series	Dana® P22, Hendrickson HP - 2.50"
61151 Series	Meritor TL - 2.50"
H1975 Series	ThermALERT™ for Meritor TP, TB (1998 and later), WP, Hendrickson HP - 2.75"

Tapered Spindle

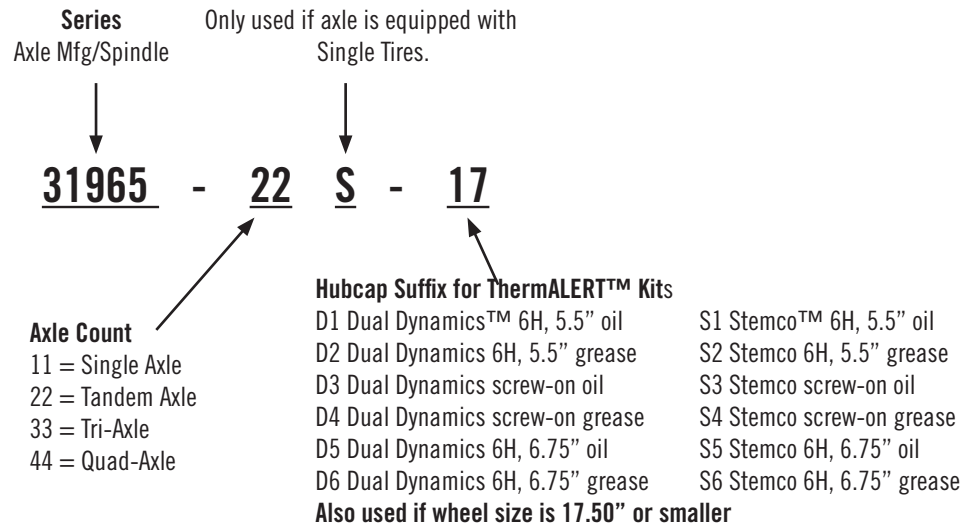
31924 Series	Dana/Eaton® D22 Solid Spindle (See page 7 for drill jig details.)
31935 Series	Ingersoll® F22
31965 Series	Meritor TN/TQ, RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle
32375 Series	Holland Trade Note: check diameter of opening to determine kit.
32645 Series	Sudisa 11-M
H1965 Series	ThermALERT™ for Meritor TN/TQ, RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle

MTIS Prepped Axles

32712 Series	All Manufacturers (does not include Press Plugs and Stators)
H2712 Series	ThermALERT™ for All Manufacturers (does not include ThermALERT™ Press Plugs and Stators)

MERITOR TIRE INFLATION SYSTEM RETROFIT KIT

MTIS Retrofit Kit Part Number Designation:



For Five Axle Trailers: Use one Quad-Axle Kit and one Single Axle Kit or one Tri-Axle Kit and one Tandem Axle Kit.

Guidelines for Specifying the Correct Kits for the Meritor Tire Inflation System (MTIS™) by PSI™

As the leading automatic tire inflation system in North America, the Meritor Tire Inflation System (MTIS™) by PSI™ is designed to be compatible with a wide range of axle and wheel-end component combinations. To help ensure that you specify the correct MTIS kit for an application, Meritor is pleased to provide the following guidelines concerning the length of the thru-tee tube, which depends on the type of axles and wheel-ends on the trailer.

For Installation on Meritor TN/TQ Axles with Tapered Spindles

Specify kits having thru-tee assemblies with 3.5" long tubes when the trailer axles are equipped with ductile iron hubs. If the trailer axles are equipped with aluminum hubs, specify an MTIS kit containing thru-tees with 4" long tubes.

For Installation on Meritor TP Axles with Parallel Spindles

Specify kits having thru-tee assemblies with 4" long tubes when the trailer axles are equipped with ductile iron hubs. If the trailer axles are equipped with aluminum hubs, specify an MTIS kit containing thru-tees with 5" long tubes.



MTIS Kit Part Numbers

“Partial” MTIS Kits

“Partial” kits do not include spindle press plugs or stators. Partial kits are for installation on axles prepped for MTIS. (The spindle press plugs and stators have been installed on the axles.)

Note that the standard thru-tee length for partial MTIS kits is 3.5". If you require a longer thru-tee length, please inform your Meritor customer service representative when placing your MTIS order. When a length other than the standard 3.5" is specified, it will be stated in the kit part number. Refer to the following table for examples.

(Thru-tee Tube Length)

Trailer Axle and Hub types	Recommended Thru-Tee Tube Length	Standard MTIS Kit Number Example	MTIS with ThermALERT™ Kit Number Example
TN axle with ductile iron hubs	3.5"	32712-22	H2712-22
TN axle with aluminum hubs	4"	32712-22-4	H2712-22-4
TP axle with ductile iron hubs	4"	32712-22-4	H2712-22-4
TP axle with aluminum hubs	5"	32712-22-5	H2712-22-5

“Full” MTIS Kits

“Full” MTIS kits are for installation on axles not previously prepped for MTIS. These kits include spindle press plugs and stators.

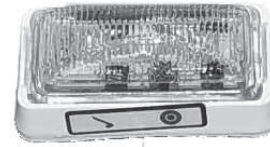
The standard thru-tee tube length for a full MTIS kit is based on the spindle type for which the kit is intended. For example, a full MTIS kit for a TN axle will have a standard thru-tee tube length of 3.5," while a full MTIS kit for a TP axle will have a standard thru-tee tube length of 4".

If you require a thru-tee length longer than the standard length, please inform your Meritor customer service representative when placing your MTIS order. When a length other than the standard is specified, it will be stated in the kit part number. Refer to the table below for examples.

Axle / Spindle Type	Hub Type	Recommended Thru-tee Tube Length	Example Standard MTIS Kit Number	Example MTIS with ThermALERT™ Kit Number
TN/TQ, HN	Ductile Iron	3.5"	31965-22	H1965-22
TN/TQ, HN	Aluminum	4"	31965-22-4	H1965-22-4
TP, WP, HP (2.75" bore)	Ductile Iron	4"	31975-22	H1975-22
TP, WP, HP (2.75" bore)	Aluminum	5"	31975-22-5	H1975-22-5

Please contact your Meritor representative for assistance to obtain the correct kit for the application. You can also access product and service information on the Meritor Tire Inflation System (MTIS) in the Literature On Demand section of www.Meritor.com.

MERITOR TIRE INFLATION SYSTEM CONTROL BOX COMPONENTS



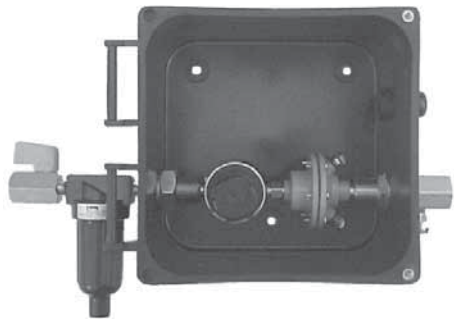
Part Number	Description
31023-01	Primary Pressure Protection Valve Assembly.

Part Number	Description
31263-17	Light, Bracket and Hardware. May require drilling new mounting holes.



Part Number	Description
31052-35	1/4" Tubing, 35 Feet.
31182-70	Electrical Cable, 70 Feet.

Part Number	Description
31263-14	LED Lamp for ThermALERT.
31263-15	LED Bracket for ThermALERT.
31263-16	LED Pigtail for ThermALERT.



Part Number	Description
31082-00	Control Box Assembly (includes Primary In-Line Filter). ThermALERT ready. Replaces 31084-00 which cannot be used on ThermALERT Systems. For exploded view and components, see Page 2.
31073-00	Control Box Bracket.
31083-01	Control Box – empty box, lid, and screws.
31083-28	Lid only.

Part Number	Description
31103-00	Control Box Self-Draining Filter.



Part Number	Description
31083-09	Control Box Shut-Off Valve.



Part Number	Description
31083-02	Control Box Pressure Regulator Valve.

MERITOR TIRE INFLATION SYSTEM CONTROL BOX COMPONENTS



Part Number	Description
31114-00	Control Box Bulkhead/Check Valve.



Part Number	Description
31084-02	Bulkhead Fitting.



Part Number	Description
31083-12	Drain – Petcock.



Part Number	Description
31084-10	Control Box Flow Sensing Switch - In-Line. ThermALERT ready. Color Gray. Replaces 31084-03 which cannot be used on ThermALERT systems.



Part Number	Description
31313-29 M	Crush Washer for Thru-Tee Assemblies.

MERITOR TIRE INFLATION SYSTEM CONTROL BOX COMPONENTS

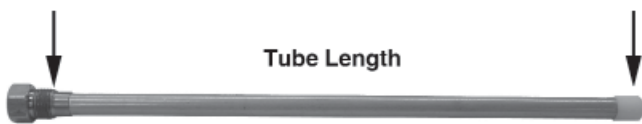


Part Number	Tube Length	Description
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31317-03	3.50"	Brass Thru-Tee Assembly with Tee Vent and Shield. Stainless steel tube. For Dual Tire Applications. Replaces 31315-03, 31316-03.
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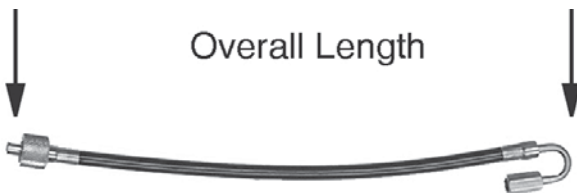
31317-00	4"	Brass Thru-Tee Assy. with Tee Vent and Shield. Stainless steel tube. For Dual Tire Applications. Replaces 31316-00.
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31317-04	5"	Brass Thru-Tee Assembly with Tee Vent and Shield. Stainless steel tube. For Dual Tire Applications. Replaces 31315-04, 31316-04.
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Part Number	Tube Length	Description
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31314-21	10.50"	Stator & Filter Assembly (1/4" NPT). Threads into spindle plug.
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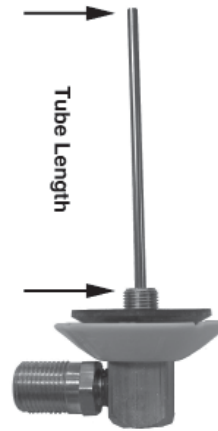


Part Number	Overall Length	Description
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31364-00	11.50"	For wheels 17.50" or smaller.
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31363-00	13.50"	Short Flex Hose (Outside Tire). For wheels larger than 17.50".
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11342-04	NA*	3 PSI Valve core with white band
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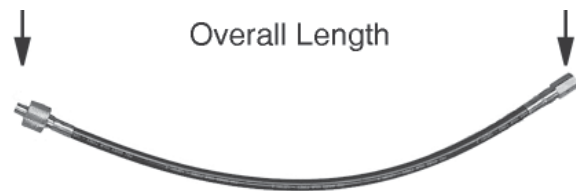
Part Number	Tube Length	Description
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31317-03-S	3.50"	Brass Thru-Tee Assembly with Tee Vent and Shield. Stainless steel tube. For Super Single Tire Applications. Replaces 31315-03-S, 31316-03-S.
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31317-00-S	4"	Brass Thru-Tee Assembly with Tee Vent and Shield. Stainless steel tube. For Super Single Tire Applications.
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31317-04-S	5"	Brass Thru-Tee Assembly with Tee Vent and Shield. Stainless steel tube. For Super Single Tire Applications.
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31317-03-S-Drive	2"	Tee for life axle.
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Part Number	Overall Length	Description
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31374-00	12.50"	For wheels 17.50" or smaller. Also for use with Super Single tires.
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31373-00	17.00"	Long Flex Hose (Inside Tire). For wheels larger than 17.50" Also for use with Super Single tires.
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11373-05	NA*	Gasket for inside wheel end of Flex Hose.
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31373-11	11.50"	For 17" or larger dual tires.
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MERITOR TIRE INFLATION SYSTEM WHEEL-END COMPONENTS



Part Number	Description
31982-01	Small Parts Assortment. Contains: Pressure Protection Valve, 1/4" NPT x 1/4" TBG 90° Fitting, 3/8" Hex Nipple, 1/8" x 1/4" TBG Compression, 5/16" Hex Head Capscrew, 5/16" Self Locking Hex Nut, 1/4" Flat Washer, 1/4" Locknut, 1/4" TBG Union Tee.



Part Number	Description
32701-01A	1.50" Press Plug Kit with O-Ring. Includes adhesive. Used in Ingersol F22.
32611-01A	1.50" Press Plug Kit with O-Ring. Includes adhesive. Used in Sudisa 11M.
32202-01A	1.75" Press Plug Kit with O-Ring. Includes adhesive. Used in Meritor TN/TQ, RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle.
32342-01A	1.904" Press Plug Kit with O-Ring. Includes Adhesive. Used in Holland Trade.
32473-01A	2.50" Press Plug Kit with O-Ring. Includes Adhesive. Used in Dana P22, Hendrickson HP (Pre 2002).
32184-01A	2.75" Press Plug Kit with O-Ring. Includes Adhesive. Used in Meritor TP, TB, WP, Hendrickson HP (After 2002)
32382-01A	2.95" Press Plug Kit with O-Ring. Includes Adhesive. Used in Meritor TB Axles with Large Spindle Bore.
61021-01A	Press Plug Kit with O-Ring. Includes Adhesive. Used in Meritor TL Axles.



Part Number	Description
81044-00	Slide Hammer - Removes axle plugs and press plugs.



Part Number	Description
32601-01A	2.25" Press Plug Kit with O-Ring. Includes Adhesive. Used in Sudisa 12R.
32321-01A	2.75" Press Plug Kit with O-Ring. Includes Adhesive. Used in Holland ProPar.
32271-01	Press Plug Kit with O-Ring. Includes Adhesive. Used in Sudisa 9M Axle.



Part Number	Description
H2200-02	ThermALERT Thermal Plug Kit (includes gasket).



Part Number	Description
H2184-01	ThermALERT Press Plug. Used in Meritor TP/WP axles and Hendrickson HP Axles (includes H2200-02).
H2202-01	ThermALERT Press Plug. Used in Meritor TN/TQ, RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle (includes H2200-02).
H2473-01	ThermALERT Press Plug for Dana P22.

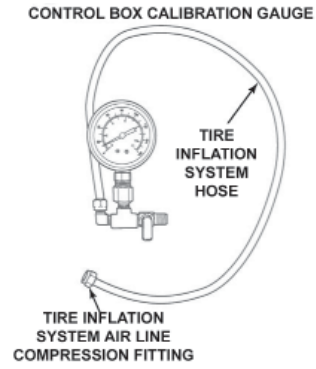


Part Number	Description
81044-01	Welsh Plug Removal Spear. Attaches to 81044-00.

MERITOR TIRE INFLATION SYSTEM WHEEL-END COMPONENTS



Part Number	Description
81044-02	Press Plug Remover. Attaches to 81044-00.



Part Number	Description
51031-00	System Pressure Test Gauge. Replaces 81014-00.

Additional MTIS Service and Speciality Tools available from Hi-Tec Trailer, Inc., (361-547-0661) including:

Solid Spindle Drill Jig 81023-00

Tap Guide 81023-10

Polishing and Bore Tools available from Grainger® (See MM14P).

HUBCAPS



Bolt-on Oil



Screw-on



Bolt-on Grease

Part Number	Bolt Holes	Bolt Circle	Type	Description
Dual Dynamics				
32270-00	6	4"	Grease	Special Drive Axle Hub for Drop Axles.
32273-00	6	5.50"	Grease	Dual Dynamics hubcap version 401-G. For Meritor TN/TQ Axles and Hendrickson HN Axles.
32283-00	6	5.50"	Oil	Dual Dynamics hubcap version 207P6. For Meritor TN/TQ Axles and Hendrickson HN Axles.
32293-00	Screw-on		Grease	Dual Dynamics hubcap version 269G6. For Meritor TB Axles.
32295-00	Screw-on		Oil	Dual Dynamics hubcap version 267P6. For Meritor TB Axles.
32514-00	6	6.75"	Grease	Dual Dynamics hubcap version 456G6. For Meritor TP/WP Axles and Hendrickson HP Axles.
32515-00	6	6.75"	Oil	Dual Dynamics hubcap version 260P6. For Meritor TP/WP Axles and Hendrickson HP Axles.
Stemco				
31426-00	6	5.50"	Grease	Stemco hubcap version 4009. For Meritor TN/TQ Axles and Hendrickson HN Axles.
31427-00	6	5.50"	Oil	Stemco hubcap version 4009. For Meritor TN/TQ Axles and Hendrickson HN Axles.
31428-00	6	6.375"	Grease	Stemco hubcap (340-4384). For Meritor TL Axles.
31436-00	Screw-on		Grease	Stemco hubcap version 4075. For Meritor TB Axles.
31437-00	6	6.75"	Grease	Stemco hubcap version 4195. For Meritor TP/WP Axles and Hendrickson HP Axles.
31438-00	Screw-on		Oil	Stemco hubcap version 4075. For Meritor TB Axles.
31439-00	6	6.75"	Oil	Stemco hubcap version 4195. For Meritor TP/WP Axles and Hendrickson HP Axles.

MERITOR TIRE INFLATION SYSTEM PARTS LIST

Part Number	Description	Part Number	Description
Spare Parts		32645-03	Sudisa 11-M
31012-01	3/8" Hex Nipple, 2 pack	32815-03	Dana P22, Hendrickson HP
31042-00	90° 1/8"MNPT x 1/4"TBG	Spare Parts - Wheel Ends	
31083-28	Control Box Lid w/Screws and Gasket	31482-01	12-R Press Plug O-Ring (328), 3 pack
31084-01	Bulkhead Fitting	31492-01	O-Ring (small 020), 10 pack
31114-00	Steel 1/8" Bulkhead/Check Valve	32184-01A	TP Press Plug Kit with O-Ring
31163-00	1/4"TBG Union Tee	32202-01A	1.75" Press Plug Kit with O-Ring
31182-70	Wiring Harness	32251-01	O-Ring (large 324), 3 pack
31222-00	1/4" Cable Choke Seal	32321-01A	ProPar Press Plug Kit with O-Ring
31272-01	MTIS Attention Label, 10 pack	32342-01A	1.86" Holland Trade Press Plug Kit
31282-01	MTIS 1-800 Label, 10 pack	32352-01	1.86" Press Plug O-Ring (223), 3 pack
32261-00	MTIS Light Label (Single Pack)	32382-01A	2.95" Press Plug Kit with O-Ring used in Meritor TB Axles with Large Spindle Bore
31083-23	Control Box Only (without lid)	32472-01A	2.50" Hendrickson HP Press Plug Kit
Hub Caps - MTIS Ready		32473-01A	2.50" Press Plug Kit with O-Ring used in Dana P22, Hendrickson HP
31427-00	Stemco Hub Cap Version 4009 - Oil (Bolt-on)	32801-00	HP Plug O-Ring (330), 3 pack
31426-00	Stemco Hub Cap Version 4009 - Grease (Bolt-on)	32601-01A	2.25" 12-R Sudisa Press Plug Kit
31428-00	Stemco Hub Cap - Grease	32611-01A	1.50" 11-M Sudisa Press Plug Kit
31438-00	Stemco Hub Cap Version 4075 - Oil (Screw-on, Straight Spindle)	32651-01	11-M Press Plug O-Ring (218), 3 pack
31436-00	Stemco Hub Cap Version 4075 - Grease (Screw-on, Straight Spindle)	32671-01	TP Press Plug O-Ring (230), 3 pack
31439-00	Stemco Hub Cap Version 4195 - Oil (Bolt-on, Straight Spindle)	32701-01A	1.50" Ingersol F22 Press Plug Kit
31437-00	Stemco Hub Cap Version 4195 - Grease (Bolt-on, Straight Spindle)	32721-01A	O-Ring (217) F22 Ingersol, 3 pack
32273-00	DD Hub Cap (5.50" Bolt-On) - Grease	Drive Handle and Drivers (for installation of Press Plugs into Axle Spindles)	
32283-00	DD Hub Cap (5.50" Bolt-On) - Oil	51011-01	Driver - Holland ProPar
32293-00	DD Hub Cap (Screw-On) - Grease	51011-02	Driver - Meritor TN/TQ, RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle
32295-00	DD Hub Cap (Screw-On) - Oil	51011-03	Driver - Sudisa 12-R
32514-00	DD Hub Cap (6.75" Bolt-On) - Grease	51011-04	Driver - Sudisa 11-M
32515-00	DD Hub Cap (6.75" Bolt-On) - Oil	51011-05	Driver - Holland Trade
Wheel End Kits** (includes Plug, Stator, Thru-Tee, Hoses) for 17.50" and larger		51011-06	Driver - Meritor TP/TB
31924-03	Dana/Eaton V3 and V4	51011-07	Driver - Meritor WP
31935-03	Ingersol F22, Hendrickson HN	51011-08	Driver - Ingersol F22
31955-03	Holland ProPar	51011-09	Driver - Sudisa 9-M
31964-03	Meritor TN/TQ, HN, D22 Hollow	51011-10	Drive Handle
32375-03	Holland Trade	51011-11	Driver - Hendrickson ProPar (2.50")
32405-03	Meritor TB (2.95")	51011-13	Driver - Dana P22
32595-03	Sudisa 12-R	51011-14	Driver - Meritor TB (2.95" Oversized Bore)
		61051-00	Driver - Meritor TL

* Not interchangeable. Change effective January 2000. **Order one kit per wheel.

MERITOR TIRE INFLATION KITS LIST

Part Number	Description	Part Number	Description
Standard Kits		Retrofit Kits	
31924-11	Dana/Eaton D22 Solid Spindle, Single Axle	32595-11	Sudisa 12-R, Single Axle
31924-22	Dana/Eaton D22 Solid Spindle, Tandem Axle	32595-22	Sudisa 12-R, Tandem Axle
31924-33	Dana/Eaton D22 Solid Spindle, Tri-Axle	32595-33	Sudisa 12-R, Tri-Axle
31935-11	Ingersol F22, Single Axle	32645-11	Sudisa 11-M, Single Axle
31935-22	Ingersol F22, Tandem Axle	32645-22	Sudisa 11-M, Tandem Axle
31935-33	Ingersol F22, Tri-Axle	32645-33	Sudisa 11-M, Tri-Axle
31955-11	Holland ProPar, Single Axle	32712-11	MTIS Prepped Single Axle
31955-22	Holland ProPar, Tandem Axle	32712-22	MTIS Prepped Tandem Axle
31955-33	Holland ProPar, Tri-Axle	32712-33	MTIS Prepped Tri- Axle
31965-11	Meritor TN/TQ, RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle, Single Axle	32815-11	Dana P22, Hendrickson HP, Single Axle
31965-22	Meritor TN/TQ, RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle, Tandem Axle	32815-22	Dana P22, Hendrickson HP, Tandem Axle
31965-33	Meritor TN/TQ, RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle, Tri-Axle	32815-33	Dana P22, Hendrickson HP, Tri-Axle
31975-11	Meritor TP, TB (1998 and later), WP, Single Axle	ThermALERT* Kits	
31975-22	Meritor TP, TB (1998 and later), WP, Tandem Axle	H1965-11	ThermALERT for Meritor TN/TQ, RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle, Single Axle
31975-33	Meritor TP, TB (1998 and later), WP, Tri-Axle	H1965-22	ThermALERT for Meritor TN/TQ, RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle, Tandem Axle
32375-11	Holland Trade, Single Axle	H1965-33	ThermALERT for Meritor TN/TQ, RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle, Tri-Axle
32375-22	Holland Trade, Tandem Axle	H1975-11	ThermALERT for Meritor TP, TB (1998 and later), WP, Single Axle
32375-33	Holland Trade, Tri-Axle	H1975-22	ThermALERT for Meritor TP, TB (1998 and later), WP, Tandem Axle
32405-11	Meritor TB (before 1998), Single Axle	H1975-33	ThermALERT for Meritor TP, TB (1998 and later), WP, Tri-Axle
32405-22	Meritor TB (before 1998), Tandem Axle	*Determine appropriate suffix for part number to obtain correct hubcaps – see page 3.	
32405-33	Meritor TB (before 1998), Tri-Axle		
32293-00	DD Hub Cap (Screw-On) - Grease		
32295-00	DD Hub Cap (Screw-On) - Oil		
32514-00	DD Hub Cap (6.75" Bolt-On) - Grease		
32515-00	DD Hub Cap (6.75" Bolt-On) - Oil		

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