

MERITOR® TIRE INFLATION SYSTEM (MTIS)

WITH THERMALERT™ STANDARD



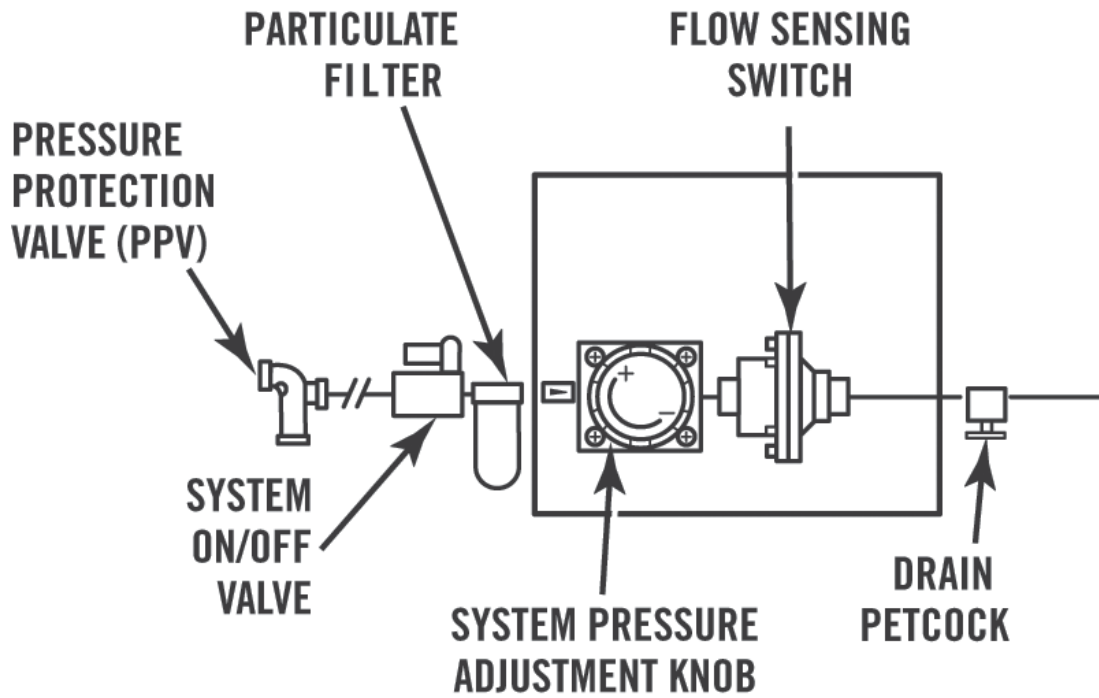
MERITOR



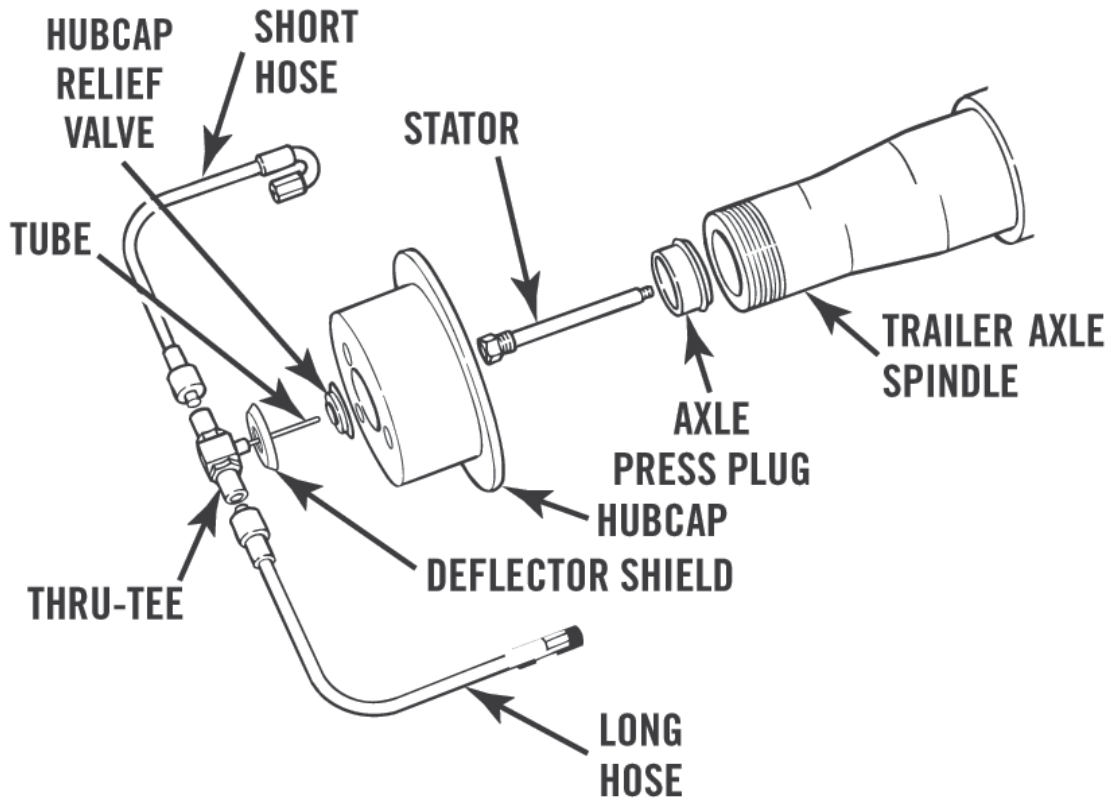
TABLE OF CONTENTS

Control Box	6
Exploded Views	2
Guidelines for Specifying the Correct Kits for the Meritor Tire Inflation System.....	5
Hoses.....	8
Hubcaps	11
Lights	6
Press Plug Kits	9
Retrofit Kit	3
Stators.....	8
Thru-Tees.....	9
Tools	10
Suggested Stocking List	12

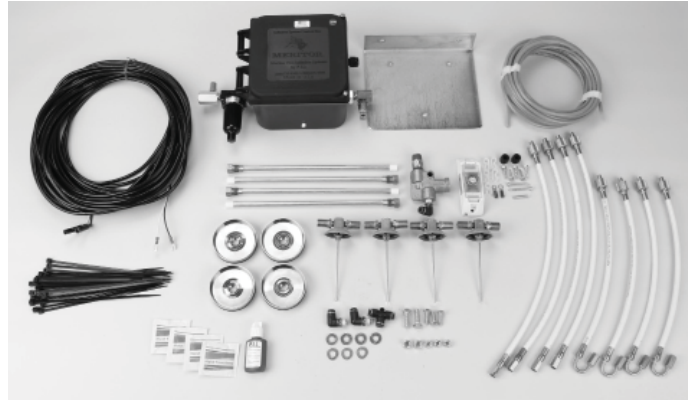
CONTROL BOX ASSEMBLY



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	Thru-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, wheel type (steel or aluminum) 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 and hub type - Standard, PreSet™ or PreSet Plus™.

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	ProPar™ (Square Axle)
H1975 Series	Meritor TP, TB (1998 and later), WP, Hendrickson® HP, SAF Holland® Ingersoll® F24 - 2.75"
H1995 Series	Meritor TP MTec6 axles
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"

Tapered Spindle

31924 Series	Dana/Eaton® D22 Solid Spindle (See page 10 for drill jig details.)
31935 Series	Ingersoll® F22 (For axles manufactured prior to August 2017.)
H1965 Series	Meritor TN/TQ, Ingersoll F22 axles (manufactured in or after August 2017), RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle
H1985 Series	Meritor TN MTec6 axles
32375 Series	Holland Trade Note: check diameter of opening to determine kit.
32645 Series	Sudisa 11-M

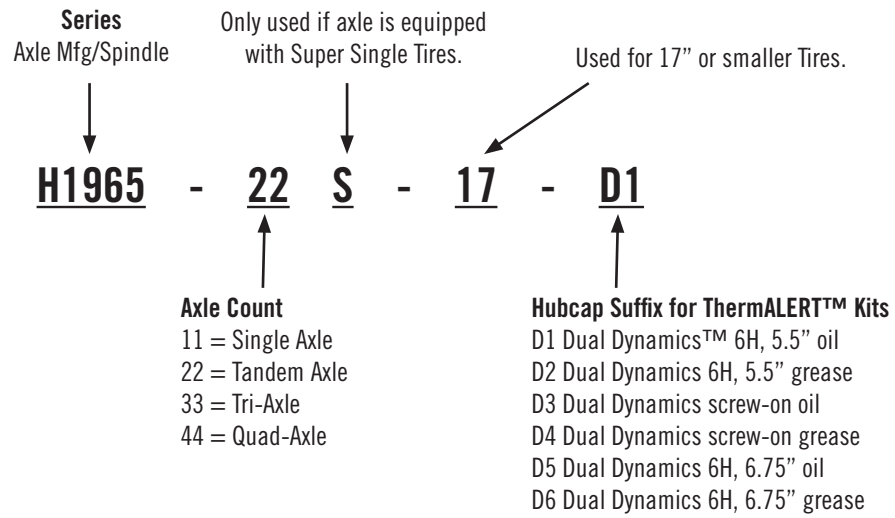
MTIS Prepped Axles

H2712 Series	All Manufacturers (does not include Press Plugs and Stators)
--------------	--

NOTE: ThermALERT™ became a standard feature in all Meritor TN/TQ and TP retrofit kits starting 10/1/17.

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.

Add -CP to the end of part number to indicate hoses with Auxiliary Check Ports

Guidelines for Specifying the Correct Kits for the Meritor Tire Inflation System (MTIS™) with ThermALERT™ Standard

As the leading automatic tire inflation system in North America, the Meritor Tire Inflation System (MTIS™) with ThermALERT™ Standard 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.

For Installation on Meritor TN/TQ or TP Axles Equipped with PreSet or PreSet Plus Wheel Ends

Specify kits having thru-tee assemblies 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	MTIS with ThermALERT™ Kit Number
TN axle with ductile iron hubs	3.5"	H2712-22
TN axle with aluminum hubs	4"	H2712-22-4
TP axle with ductile iron hubs	4"	H2712-22-4
TP axle with aluminum hubs	5"	H2712-22-5
TN/TQ or TP axle with PreSet or PreSet Plus hubs	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	MTIS with ThermALERT™ Kit Number
TN/TQ, HN	Ductile Iron	3.5"	H1965-22
TN/TQ, HN	Aluminum	4"	H1965-22-4
TP, WP, HP (2.75" bore)	Ductile Iron	4"	H1975-22
TP, WP, HP (2.75" bore)	Aluminum	5"	H1975-22-5
TP	PreSet or PreSet Plus	5"	H1975-22-5
TN/TQ	PreSet or PreSet Plus	5"	H1965-22-5

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.



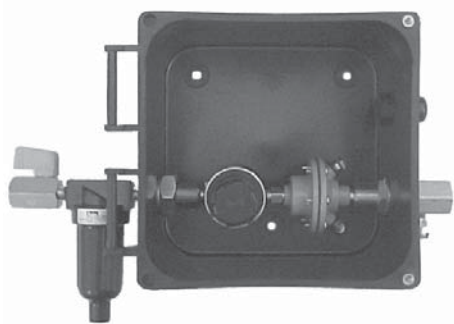
MERITOR TIRE INFLATION SYSTEM CONTROL BOX COMPONENTS



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



Part Number	Description
31052-35	1/4" Tubing, 35 Feet.
31182-40	Electrical Cable, 40 Feet.
31182-70	Electrical Cable, 70 Feet.



Part Number	Description
31082-00	Control Box Assembly (includes Primary In-Line Filter). 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
31263-14	LED Lamp Assembly.



Part Number	Description
31103-00	Control Box Particulate Filter.



Part Number	Description
31082-00-CX	Control Box Assembly (includes Particulate Filter). Features extra auxiliary (right side of image).



Part Number	Description
31263-11	ABS Connector.

MERITOR TIRE INFLATION SYSTEM CONTROL BOX COMPONENTS



Part Number	Description
-------------	-------------

31083-09	Control Box Shut-Off Valve.
----------	-----------------------------



Part Number	Description
-------------	-------------

31084-01-A	Outlet Bulkhead Assembly.
------------	---------------------------



Part Number	Description
-------------	-------------

31083-02	Control Box Pressure Regulator Valve.
----------	---------------------------------------



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
-------------	-------------

31114-00	Inlet Control Box Bulkhead/Check Valve.
----------	---



Part Number	Description
-------------	-------------

31083-12	Drain - Petcock.
----------	------------------



Part Number	Description
-------------	-------------

31313-29 M	Crush Washer for Thru-Tee Assemblies.
------------	---------------------------------------

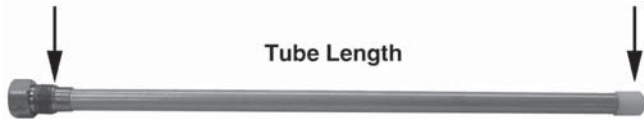
MERITOR TIRE INFLATION SYSTEM CONTROL BOX COMPONENTS



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.



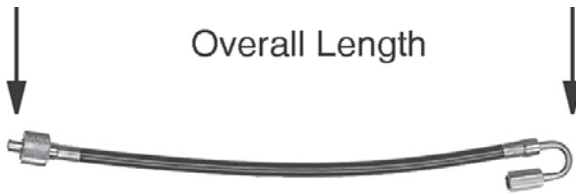
Tube Length

Part Number	Tube Length	Description
-------------	-------------	-------------

31314-21

10.50"

Stator & Filter Assembly (1/4" NPT). Threads into spindle plug.



Overall Length

Part Number	Overall Length	Description
-------------	----------------	-------------

31364-00

11.50"

For wheels 17.50" and 19.50".

31363-00

13.50"

Short Flex Hose (Outside Tire). For wheels 22.50" and 24.50".

11342-04

NA*

3 PSI Valve core with white band



Overall Length

Part Number	Overall Length	Description
-------------	----------------	-------------

31364-00-CP

11.50"

For wheels 17.50" and 19.50".

31363-00-CP

13.50"

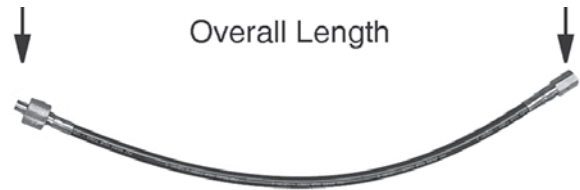
Short Flex Hose (Outside Tire). For wheels 22.50" and 24.50".



Part Number	Description
-------------	-------------

H2200-02

ThermALERT Thermal Plug Kit (includes gasket).



Overall Length

Part Number	Overall Length	Description
-------------	----------------	-------------

31373-11

11.50"

For use with Super Single tires or wide base tires.

31374-00

12.50"

For wheels 17.50" and 19.50".

31373-00

17.00"

Long Flex Hose (Inside Tire). For wheels 22.50" and 24.50".

11373-05

NA*

Gasket for inside wheel end of Flex Hose.

31373-16

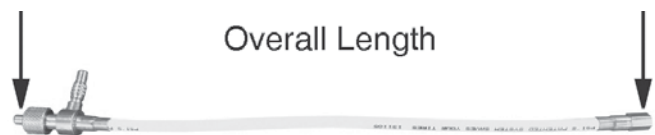
16.00"

Long Flex Hose (inside tire) for 22.50" 10-hole aluminum wheels.

31373-15

15.00"

Long Flex Hose (inside tire) for 19.50" 10-hole aluminum wheels.



Overall Length

Part Number	Overall Length	Description
-------------	----------------	-------------

31373-11-CP

11.50"

Auxiliary Port Hose for use with Super Single tires or wide base tires.

31373-00-CP

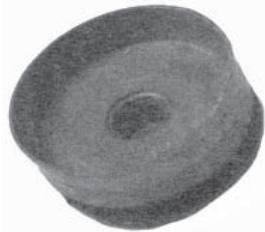
17.00"

Auxiliary Port Hose (Inside Tire). For wheels 22.50" and 24.50".

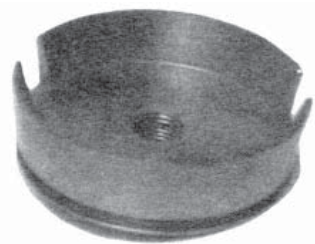
NA = Not Applicable

U.S. 888-725-9355
Canada 800-387-3889

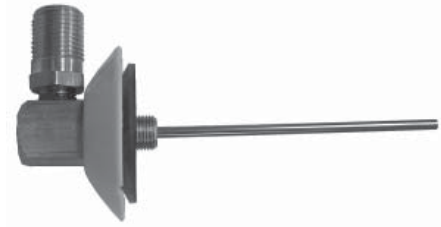
MERITOR TIRE INFLATION SYSTEM WHEEL-END COMPONENTS



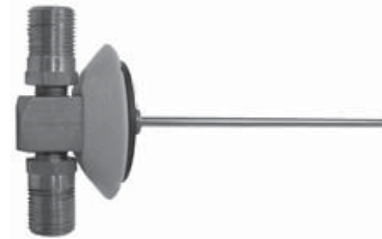
Part Number	Description
32701-01A	1.50" Press Plug Kit with O-ring. Includes adhesive. Used in Ingersoll F22 (axles manufactured prior to August 2017).
32611-01A	1.50" Press Plug Kit with O-ring. Includes adhesive. Used in Sudisa 11M.
32342-01A	1.904" Press Plug Kit with O-ring. Includes Adhesive. Used in Holland Trade.
32473-01A	2.50" Press Plug Kit with O-ring. Includes Adhesive. Used in Dana P22, Hendrickson HP (Pre 2002).
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
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.
32271-01A	Press Plug Kit with O-ring. Includes Adhesive. Used in Sudisa 9M Axle.



Part Number	Tube Length	Description
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.
31317-00-S	4"	Brass Thru-Tee Assembly with Tee Vent and Shield. Stainless steel tube. For Super Single Tire Applications.
31317-04-S	5"	Brass Thru-Tee Assembly with Tee Vent and Shield. Stainless steel tube. For Super Single Tire Applications.
31317-03-S-Drive	2"	Tee for lift axle.



Part Number	Tube Length	Description
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.
31317-00	4"	Brass Thru-Tee Assy. with Tee Vent and Shield. Stainless steel tube. For Dual Tire Applications. Replaces 31316-00.
31317-04	5"	Brass Thru-Tee Assembly with Tee Vent and Shield. Stainless steel tube. For Dual Tire Applications. Replaces 31315-04, 31316-04.



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

MERITOR TIRE INFLATION SYSTEM WHEEL-END COMPONENTS



Part Number	Description
-------------	-------------

H2184-01A	2.75" ThermALERT™ Press Plug Kit with O-ring. Includes Adhesive. Used in Meritor TP, TB, WP, Hendrickson HP, Ingersoll F24.
------------------	---

H2202-01A	1.75" ThermALERT™ Press Plug Kit with O-ring. Includes Adhesive. Used in Meritor TN/TQ, RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle, Ingersoll F22 axles manufactured in or after August 2017.
------------------	---

H2473-01A	ThermALERT Press Plug for Dana P22. Includes Adhesive.
------------------	--

H2190-01A	ThermALERT Press Plug Kit with O-ring. Includes Adhesive. Used in Meritor TP Mtec6 axles.
------------------	---

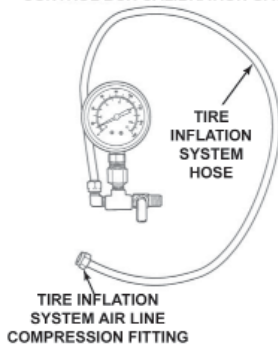
H2300-01A	ThermALERT Press Plug Kit with O-ring. Includes Adhesive. Used in Meritor TN Mtec6 axles.
------------------	---



Part Number	Description
-------------	-------------

51011-10	Drive Handle - for installation of press plug
-----------------	---

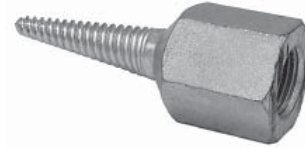
CONTROL BOX CALIBRATION GAUGE



Part Number	Description
-------------	-------------

51032-00	System Pressure Test Gauge. Replaces 81014-00.
-----------------	--

31373-00	Hose
-----------------	------



Part Number	Description
-------------	-------------

81044-01	Welch Plug Removal Spear. Attaches to 81044-00.
-----------------	---



Part Number	Description
-------------	-------------

	The following attach to 51011-10
--	----------------------------------

51011-01	Driver - Holland ProPar
-----------------	-------------------------

51011-02	Driver - Meritor TN/TQ, RN/RQ, Hendrickson HN, Dana/Eaton D22 Hollow Spindle
-----------------	--

51011-03	Driver - Sudisa 12-R
-----------------	----------------------

51011-04	Driver - Sudisa 11-M
-----------------	----------------------

51011-05	Driver - Holland Trade
-----------------	------------------------

51011-06	Driver - Meritor TP/TB
-----------------	------------------------

51011-07	Driver - Meritor WP
-----------------	---------------------

51011-08	Driver - Ingersoll F22
-----------------	------------------------

51011-09	Driver - Sudisa 9-M
-----------------	---------------------

51011-11	Driver - Hendrickson ProPar (2.50")
-----------------	-------------------------------------

51011-13	Driver - Dana P22
-----------------	-------------------

51011-14	Driver - Meritor TB (2.95" Oversized Bore)
-----------------	--

51011-15	Driver - Modified Dana P22
-----------------	----------------------------

61051-00	Driver - Meritor TL
-----------------	---------------------

51011-19	Driver - Meritor Mtec6 TP
-----------------	---------------------------

51011-20	Driver - Meritor Mtec6 TN
-----------------	---------------------------



Part Number	Description
-------------	-------------

81044-02	Press Plug Remover. Attaches to 81044-00.
-----------------	---

Additional MTIS Service and Speciality Tools available from Hi-Tec Trailer, Inc., (361-597-0032) including:

Solid Spindle Drill Jig 81023-00

Tap Guide 81023-10

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

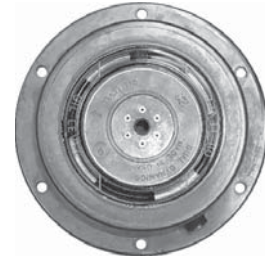
HUBCAPS



Bolt-on Oil



Screw-on



Bolt-on Grease

Part Number	Bolt Holes	Bolt Circle	Type	Description
Dual Dynamics				
32270-00	6	4"	Oil	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 equipped with PRECISION320™ spindle nut.
32515-00	6	6.75"	Oil	Dual Dynamics hubcap version 260P6. For Meritor TP/WP Axles and Hendrickson HP Axles equipped with PRECISION320™ spindle nut.
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.
SKF				
31537-00	6	6.75"	Grease	SKF hubcap version 1499. For Hendrickson Axles equipped with PRECISION320™ spindle nut.
31539-00	6	6.75"	Oil	SKF hubcap version 1996. For Hendrickson Axles equipped with PRECISION320™ spindle nut.

MERITOR TIRE INFLATION SUGGESTED STOCKING LIST

Part Number	Description	Suggested Stocking Quantity
Tire Inflation System Retro Fit Kits		
H1975-22	ThermALERT™ Straight Spindle for Meritor TP, TB (1998 and later), WP, Hendrickson® HP-2.75"	5
H1965-22	ThermALERT™ Tapered Spindle for Meritor TN/TQ, RN/RQ, Hendrickson® HN, Dana/Eaton D22 Hollow Spindle	7

Control Box Components		
31263-06	Light, bracket and hardware	10
31023-01	Primary Pressure Protection Valve Assembly	5
31103-00	Filter Cartridge	5
31083-09	Control Box Shut-Off Valve	4
31083-02	Control Box Pressure Regulator Valve	4
31114-00	Control Box Bulk Bulkhead/Check Valve	4
31084-01	Bulkhead Fitting	2
31083-12	Drain - Petcock	2
31084-10	Control Box Flow Sensing Switch	6
31082-00	Control Box Assembly (see page 6)	3
31083-01	Control Box - Empty box, Lid, and Screws	2
31083-28	Lid only	6

Hub Caps		
32273-00	Grease Cap for Meritor TN/TQ Axles and Hendrickson® HN Axles	10
32283-00	Oil Cap for Meritor TN/TQ Axles and Hendrickson® HN Axles	10
32514-00	Grease Cap for Meritor TP, WP axles and Hendrickson® HP Axles	10
32515-00	Oil Cap for Meritor TP, WP axles and Hendrickson® HP Axles	10

Part Number	Tube Length	Description	Suggested Stocking Quantity
Wheel End Components			
31317-03	3.50"	Thru Tee Assy For Dual Wheels	50
31317-00	4.00"	Thru Tee Assy For Dual Wheels	20
31317-04	5.00"	Thru Tee Assy For Dual Wheels	50
31317-03-S	3.50"	Thru Tee Assy For Super Single Applications	12
31317-00-S	4.00"	Thru Tee Assy For Super Single Applications	10
31317-04-S	5.00"	Thru Tee Assy For Super Single Applications	10
31314-21		Stator and Filter Assembly	24
31364-00	11.50"	Hose for wheels 17.50" or smaller	4
31374-00	12.50"	Hose for wheels 17.50" or smaller	4
31363-00	13.50"	Short flex hose (outside tire) for wheels larger than 17.50"	24
31373-00	17.00"	Long flex hose (inside tire) for wheels larger than 17.50"	24
31373-16	16.00"	Long flex hose (inside tire) for 22.50" 10-hole Aluminum wheels	10
31373-15	15.00"	Long flex hose (inside tire) for 19.50" 10-hole Aluminum wheels	10

Vehicle models, brands and names depicted herein are the property of their respective owners, and are not in any way associated with Meritor, Inc., or its affiliates.



Meritor Heavy Vehicle Systems, LLC
7975 Dixie Highway
Florence, Kentucky 41042 USA

888-725-9355 U.S.
800-387-3889 Canada
MeritorPartsOnline.com
meritor.com

©2018 Meritor, Inc.
Litho in USA, PB-9999
Revised 08-18 (47865/70906)