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TECHNICAL INFORMATION

INFORMATION TECHNIQUE

INFORMACIÓN TÉCNICA

LIMITED WARRANTY

Grote® Industries, Inc. ("Grote®") warrants its products to be free from defects in material and workmanship under normal use and service as set forth in this Limited Warranty. THIS LIMITED WARRANTY is the final, complete and exclusive expression of warranty to the purchaser and cannot be modified except in writing signed by an authorized officer of Grote®.

GENERAL ONE-YEAR LIMITED WARRANTY

Subject to the following conditions, Grote® warrants to the original purchaser only (and not to anyone else) of each new product made by Grote® that any part thereof which proves to be defective in material or workmanship within one year from the date of manufacture by Grote® will, at Grote's option, be repaired or replaced without charge upon return to Grote® of the defective product, provided any defect in the product is brought to the attention of Grote® within the warranty period, who alone will be authorized to furnish or arrange for repairs or replacements within the terms of this limited warranty.

The above limited warranty does not apply, and no warranty, either expressed or implied, shall be applicable (a) to damage resulting from accident, alteration, misuse or abuse; (b) if the product is not installed, operated and maintained according to procedures recommended by Grote®; (c) if the serial number, date code, or other identifying marks affixed to the product by Grote® are removed, obliterated or defaced. In no case shall the warranty be extended to defects in materials, components (which includes but not limited to bulbs), or services furnished by third parties, nor to the installation of the product performed by third parties, except those performed by or on behalf of Grote® authorized distributors. If any repairs are made, or any other parts are replaced during the warranty period, by any distributor other than a Grote® distributor, in accordance with service manuals, parts, accessories, or attachments other than authorized by Grote® for use in Grote's products, the purchaser shall pay for such repairs or parts without recourse against Grote®, and Grote® shall be relieved of responsibility for fulfillment of the warranty with respect to parts or components of all repairs, alterations, or replacements so made.

INSTALLATION GUIDELINES

Grote® Systems - Grote® lamp assemblies and harness products are designed to function as a complete system; therefore, this limited warranty shall not extend to failure of any Grote® products caused by the use of incompatible lamp assemblies, harness products or other components.

Heat - All electronic and lighting products produce heat. The installer is responsible for assurance that the application of the component will not result in contact with flammable material.

Surface Mount - The following procedures need to be practiced to assure proper installation: The lamp should be placed on a level unobstructed surface. Number 10 screws should be tightened to 25 in. pounds of torque. Only Grote® ULTRA-BLUE-SEAL® pigtailed should interface with any Grote® lamps. These guidelines will assure the products will function and last as they were designed. Deviations from these guidelines will void any warranty.

Design Voltage and Current - Current is provided as an approximate value and is listed for the design voltage of the lamp. The design voltage of the lamp may vary. Customers should contact Grote® Industries if detailed information is required.

IN CONSIDERATION OF THE EXPRESS WARRANTY AND OTHER TERMS HEREIN CONTAINED, THE PURCHASER AGREES THAT PURCHASER'S EXCLUSIVE REMEDY AND GROTE'S SOLE

LIABILITY ON ANY CLAIM, WHETHER IN TORT, CONTRACT OR WARRANTY, SHALL BE LIMITED TO, AT GROTE'S OPTION, REPAIR OR REPLACEMENT OF A DEFECTIVE PRODUCT. NO OTHER REMEDY (INCLUDING BUT NOT LIMITED TO INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR THE LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY; OR ANY OTHER INCIDENTAL LOSS OR DAMAGES) SHALL BE AVAILABLE TO PURCHASER. IN NO EVENT, AND FOR NO CAUSE WHATSOEVER, INCLUDING ANY BREACH OR DEFAULT BY GROTE®, SHALL GROTE® HAVE ANY MONETARY LIABILITY TO PURCHASER IN EXCESS OF THE PRICE PAID BY PURCHASER FOR THE PRODUCT IN QUESTION.

THIS LIMITED WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER EXPRESSED OR IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND OF ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF GROTE®. NO DEALER, DISTRIBUTOR OR OTHER REPRESENTATIVE OF THE COMPANY IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR TO GRANT ANY OTHER WARRANTY.

Any affirmation of fact or promise made by Grote® shall not be deemed to create an expressed warranty that the products shall conform to the affirmation or promise. Any description of the product is for the sole purpose of identifying such product and shall not be deemed to create an express warranty that the product shall conform to the description. Any sample or product model is for illustrative purposes only and shall not be deemed to create an express warranty that the whole of the products shall conform to the sample or model. Further, no affirmation or promise, or description, sample or model shall be deemed a part of the basis of the bargain between Grote® and the purchaser.

Grote® assumes no responsibility that title conveyed to the purchaser is good or the transfer of title to the products is rightful, or that the products shall be delivered free from any security interest or other lien or encumbrance of any third party, or free from any rightful claim of any third party by way of infringement or otherwise.

NON-TRANSFERABLE

THIS WARRANTY SHALL EXTEND ONLY TO THE ORIGINAL PURCHASER AND IS NON-TRANSFERABLE.

EXCEPTIONS

The general one-year (1) limited warranty shall apply but shall be altered as set forth below for the following products:

- (1) All Grote® Sealed Lamps (12 Volt Only) shall be subject to a two-year (2) limited warranty unless otherwise stated.
 - A) Grote® Economy sealed lamps shall be subject to a one-year (1) limited warranty.
- (2) Conspicuity Tape shall be subject to a five-year (5) or ten-year (10) limited warranty. Please refer to the Grote® reference guide and/or Grote® website for warranty time frame by part number.
- (3) Grote® LED Products are subject to the terms set forth below under "Special LED Limited Warranty."
- (4) Grote® ULTRA-BLUE-SEAL® Male Pin Wire Harnesses shall be subject to a seven-year (7) limited warranty.
- (5) Grote® ULTRA-BLUE-SEAL® Female Pin (Standard) Harnesses shall be subject to a five-year (5) limited warranty.
- (6) Grote® makes no warranty whatsoever with respect to bulbs and fluorescent tubes in lamp assemblies.
- (7) Grote® makes no warranty whatsoever with respect to any and all devices powered by common household-type batteries.

SPECIAL LED LIMITED WARRANTY

Grote® LED lamps are covered by the Grote® Special LED Limited Warranty and are warranted to be free from defects in workmanship and/or material only for the specified time frames listed below. Grote® will replace any Grote® LED lamp to the original purchaser, if the Grote® LED lamp fails due to defects in workmanship and/or materials during the warranty time frame specified below:

THE LED LIMITED WARRANTY DOES NOT APPLY TO SEVERE APPLICATIONS. Examples: Mining, Snow plowing and Fertilizers.

- (1) Grote® LED lamps are to REMAIN INTACT, FREE FROM PHYSICAL ABUSE, SUBJECT TO PROPER INSTALLATION WITHOUT MODIFICATION AND MUST BE USED ONLY WITH GROTE® APPROVED WIRING ACCESSORIES. ANY VIOLATION OF THESE CONDITIONS WILL VOID THIS LED LIMITED LAMP WARRANTY. For guidance regarding proper installation, please see above under "Surface Mount Installation Guidelines".
- (2) ANY DAMAGE OR CRACKING DUE TO CHEMICALS OR INCOMPATIBLE CLEANERS WILL VOID THIS WARRANTY.
- (3) Grote® LED lamps are designed to work in conjunction with the Grote® ULTRA-BLUE SEAL® Wire Harness System including Grote® factory molded pigtailed for use with the Grote® ULTRA-BLUE SEAL® Wire Harness System. Therefore, Grote® LED lamps have a Limited Warranty based on the following criteria:
 - A – Grote® SuperNova® high performance LED lamps are covered by a ten-year (10) Limited Warranty when installed with male pin, hard shell or patented double-seal pigtail connectors.
 - 1) Grote® SuperNova® high performance LED lamps are covered by a three-year (3) Limited Warranty when installed with hardwire bullet connectors.

2) Grote® SuperNova® high performance LED lamps are covered by a two-year (2) Limited Warranty when installed with hardwire termination.

- B – Grote® MicroNova® high performance LED lamps are covered by a three-year (3) Limited Warranty when installed with hardwire bullet connectors.
- C – Grote® Hi Count® LED lamps (part numbers that begin with a G) are covered by a two-year (2) Limited Warranty.
- D – Grote® WhiteLight LED lamps are covered by a three-year (3) Limited Warranty.
- E – Grote Select® high value LED Stop/Tail/Turn and Back-up lamps are covered by a two-year (2) Limited Warranty. Grote Select® LED Flood Lamps are covered by a one-year (1) Limited Warranty.
- F – Grote Brite Zone® LED lamps are covered by a two-year (2) Limited Warranty.
- G – Grote® Warning & Hazard LEDs are covered by a two-year (2) Limited Warranty.
 - 1) Any and all LED Devices powered by common household-type batteries are not covered by Grote's Limited Warranty.
- H – Other Grote® LED lamps for FMVSS applications excluding SuperNova®, MicroNova®, WhiteLight and Hi Count® are covered by a two-year (2) Limited Warranty.
- I – Other Grote® LED lamps (non-FMVSS) are covered by a one-year (1) Limited Warranty.
- J – Grote® XTL® products are covered by a one-year (1) Limited Warranty.

LED Brand Category	Termination Style					
	Male Pin	Hard Shell	Female Pin	Hardwire w/ Bullet Connectors	Hardwire	Patented Double-Seal Pigtail
Grote® SuperNova®	10	10	N/A	3	2	10
Grote® MicroNova®	N/A	N/A	N/A	3	N/A	N/A
Grote® Hi Count®	N/A	N/A	2	N/A	2	N/A
Grote® WhiteLight	3	3	3	3	3	N/A
Grote Select®	N/A	N/A	2	N/A	1	2
Grote® XTL®	N/A	1	N/A	1	1	N/A
Grote® Brite Zone®	N/A	N/A	N/A	N/A	2	N/A
Grote® Warning & Hazard LEDs	2	N/A	N/A	2	2	N/A
Grote® LEDs (FMVSS)	2	N/A	2	2	2	N/A
Grote® LEDs (non-FMVSS)	N/A	N/A	N/A	1	1	N/A

N/A - Not Available or None

Number represents the years of warranty from manufacture date

QUALITY SYSTEMS:

Product within the catalog may be manufactured under various quality system certifications. If a customer requires particular quality certifications on specific products, they may contact Grote® Industries for detailed information.

END USER RESPONSIBILITY:

Each user bears full responsibility for making their own determination as to the suitability of Grote® materials, products, recommendations, or advice for their own particular use. Each user is ultimately responsible to identify and perform tests and analyses necessary to assure that its finished parts incorporating Grote® products will be safe and suitable for use under end-user conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of this Limited Warranty or this Disclaimer, unless any such modification is specifically agreed to in writing signed by a Grote® Industries Representative.

INTELLECTUAL PROPERTY:

No statement contained herein concerning a possible or suggested use of any material, product or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Grote® Industries or any of its subsidiaries or affiliates covering such use or design, or as a recommendation for the use of such material, product or design in the infringement of any patent or other intellectual property right.

The information in this catalog is deemed correct at the time of publication and is provided in good faith. There may be inaccuracies due to legislative changes, competitive part number changes, technological advances or typographical errors. Customers should contact Grote® Industries for updated information.

WARRANTY RETURN AND REPLACEMENT INSTRUCTIONS

To be eligible for limited warranty consideration, either contact your Grote® sales representative or call Grote® customer service at **800.628.0809** (in Canada, call **800.268.5612**). Upon issuance of a returned goods authorization number, return the failed product, freight prepaid to: Warranty at Grote® Industries, Inc., 2600 Lanier Drive, Madison, Indiana 47250. In Canada, return product, freight prepaid to: Warranty at Grote® Industries Co., 230 Travail Road, Markham, Ontario L3S 3J1. Any product covered under the terms of the respective limited warranty will be replaced directly to the original consumer/purchaser only. Items received by Grote® will not be returned unless accompanied by a specific written request. The product to be returned will be those items not covered under the warranty and will be returned to sender freight collect.

CONSUMER RIGHTS IN VARIOUS STATES

This warranty gives you specific legal rights, and you may have other rights that vary from state to state. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. Further, some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

Effective October 1, 2019

TRUCK-LITE®-TO-GROTE® INTERCHANGE

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
41	40232	
43	40192	
45	41002	
52	41012	
54	41032	
172	44530	
173	44540	
182	44690	
183	44700	
262	44810	
263	44820	
266	44730	
270	44010	
275	44010	
276	44030	
282	44710	
283	44720	
285	44891	
320	73140-5	
528	52492	
529	52482	
540	50852	
541	50862	
794	49140	
797	71152	
798	71422	
900	48072	
901	48072	
902	48072	
905	48272	
910	48072	
1050	G1032	
1052	G1002	
1058	47122	
1075	G1082	
1203	46782	
1211	46792	
1213	46792	
1215	49082	
1222	45932	
1233	45462	
1259	45262	
1264	45932	
1507	46882	
1520	45512	
1560	G1502	
1960	47092	
2150	G2102	
2660	G4602	
2702	53052	
2750	G5300	
2758	G5540	
2759	G5530	
2803	53020	
3050	G3002	
3058	47112	
3070		G3002 + 43150
3612	52522	
3616	52522	
3801	56000	
3802	56000	
3806	56000	
3812	53000	
3850	55220	
3860	55280	
3861	55290	
3863	50630	
4015	50942	
4016	50952	
4017	50952	

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
4018	50942	
4023	52902	
4024	52912	
4025	52832	
4026	52822	
4027	50972	
4028	52602	
4050	G4002	
4051	G4022	
4058	54342	
4095	66905	
4550	G4502	
4558	G4502	
4742	55420	
4854	55450	
4855	55460	
5015	53722	
5070	G5092	
5071	G5082	
5072	G5212	
6050	G6002	
6051	G6012	
6053	53592	
6058	G6002	
6503	56072	
7038	12201-5	
7039	12004	
7223	12263-5	
7224	12263-5	
8004		64261-4
8140	64G01	
8150	63871	
8155	63601	
8160	BZ201-5	
8170	BZ201-5	
8180	63F81	
8861	99912	
8909	90232	
8933	90202	
8938	91502	
9004	90302	
9005	90052	
9006	91962	
9007	91962	
9016	91582	
9021	91582	
9029	90012	
9040	92172	
9049	91302	
9057	91992	
9063	91502	
9071	91302	
9079	91502	
9093	90122	
9101	68130	
9102	68170	
9104	68080	
9105	68130	
9107	68110	
9162	68080	
9179	43673	
9180	94110	
9536	51012	
9537	51002	
9944		77931
10401	94010	
10403		67050 + 92920
10410		42180 + 66850
10413		43690 + 67050
10414		93750 + 67001
10702	92070	
10704	91410	
10708	92920	

**TRUCK-LITE® - TO - GROTE®
 INTERCHANGE**

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
10713	91400	
10714	92070	
10721		42180
10725		93750
10727		42180
10728	43690	
10729		43512
10730	43522	
14701	93402	
15054	60381	
15058	60341	
15060	60381	
15208	60261	
15227	60671	
15404	43970	
15405	43970	
15412	43370	
15413	43370	
15414	43380	
15702	91380	
15727	43370	
15728	43380	
15729	43830	
15730	43830	
15733	43370	
17003	60191	
17200	60191	
19206	60291	
19721	43850	
19723	43120	
19724	43120	
19736	43120	
26330	60151	
26331	60101-5	
26335	60001	
26336	60251	
26371	60001-3	
27270	90941-5	
27450	90941-5	
30286	77193	
30401	94100	
30402	92150	
30404	93750	
30405	93760	
30407	43690	
30700	92120	
30701	92120	
30702	92150	
30704	92150	
30711	92120	
30721	93750	
30722	93760	
30726	93760	
30727	43690	
30728	43532	
30729	93750	
33711	42110	
33712	94350	
40012	62321	
40044	62181	
40203	61051	
40204	62271	
40212	62321	
40244	62171	
40403	91740	
40700	91740	
40715	43642	
40720	43572	
40725	43655	

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
40756	51032	
40757	51022	
40850	50820	
42722	43272	
44101	77363	
44102	77362	
44114	77352	
44705	43343	
45700	94180	
45701	43642	
45720	43212	
50202		01-6757-R3
50203		01-6761-T9
50301		01-6620-95
50303		01-6620-U9
50304		05-2005-54
50307	05-2013-25	
50309		01-3650-U9
50325		01-6682-72 or 01-6682-73
50342	01-6682-72	
50343	01-6682-73	
50831	93190	
50860	87860	
50896	87250	
60120	47472	
60403		92420 + 67090
60700	92420	
60704	92720	
60719	42103	
60720	43362	
60722	43952	
60723	43362	
60728	43952	
60730	43362	
60733	43952	
60734	77363	
70300	55220	
70311	50630	
80220	63971	
80304	50222	
80340	62011	
80344	62151	
80350	61821	
80352	61821	
80360	64931-5	
80361	64931-5	
80364	64441	
80373	64921	
80394	64891	
80395	64891	
80396	64891	
80438	64931-5	
80444	61371	
80482	61161	
80490	61031	
80493	64H01-5	
80513	06021-4	
80514	06021-4	
80525	06021-4	
80561	91051	
80567		05001-5
80568		05001-5
80571	90971-5	
80591	05001-5	
80720	43262-5	
80722	43262-5	
80800	64291-4	
80805	64291-4	
80878	78563	
80879	78563	
80888	64261-4	
80893	64261-4	

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
80900		64261-4
80910	64241	
80920	64251	
80930		64261-4
80940		64261-4
80950	64241	
80951	64251	
80952	64241	
80953	64251	
80954	64241	
80955	64251	
80956	64241	
80957	64251	
80958	64241	
80959	64251	
80960	64241	
80961	64251	
81380	64E01	
81500	63F21 or 63F71	
81510	63981 or 63991	
81520	BZ601-5	
81702	63H81	
81704	63H81	
81712	63H11	
81804	63H81	
91242	56072	
92550	77193	
92560	77013	
92563	77013	
92600	77003	
92602	76983	
92674	77931	
92677	77931	
92871	77351	
92884	77931	
92885	77353	
92900	73040	
92901	73040	
92902	73090	
92904	73030	
92905	73080	
92909	73040	
92910	73040	
92911	73110	
92918	73160	
92924	73090	
92925	44421	
94706	66830	
94707	66861	
94718	66930	
94729	66981	
94750	66810	
94802	66811	
94850	66800	
94853	66820	
94862	66930	
94882	66844	
94897	66831	
94902	67050	
94909	67050	
94916	67050	
94919	67050	
94924	67050	
94925	67010	
94926	67000	
94931		67090
94932	66810	
94940	68380	
94961	67011	
94962	66812	
94964	66801	
94972	66801	
94992	67010	

**TRUCK-LITE®-TO-GROTE®
INTERCHANGE**

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
94993	67090	
96106	66910	
96107	67002	
96930	66360	
96960	66160	
97005	66931	
97224		64261-4
97252	77363	
97283	44090	
97334	92513	
97360	72110-5	
97361	72100-5	
97609	12020	
97610	12020	
97611	28162	
97612	28031	
97619	28162	
97620	28031	
97621	28663	
97623	28041	
97624	16284	
97625	16294	
97627	16244	
97628	16244	
97629	16202	
97631	16173	
97632	16043	
97633	28393-5	
97636	16142	
97653	12073	
97654	12072	
97655	12243-5	
97659	12193-5	
97660	12111-5	
97669	28453	
97670	12333	
97671	12331	
97672	12303	
97673	12301	
97674	12333	
97675	12333	
97676	12331	
97687	28443	
97688	12153	
97693	26012-5	
97695	16041	
97718	11303	
97721	10025	
97725	22233	
97726	22232	
97733	11293	
97802	28032	
97803	16033	
97804	16032	
97805	12113-5	
97806	16091	
97807	12071	
97808	16101	
97809	16053	
97811	16092	
97812	16023	
97817	12173	
97818	16102	
97820	28042	
97822	16093	
97823	10173	
97826	16063	
97827	16223	
97828	10173	
97829	22193	

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
97831	12272-5	
97835	12020	
97840	28461	
97843	22013	
97845	29060	
97846	28193	
97847	12303	
97848	12333	
97860	16023	
97861	16273	
97862	28493	
97863	12010	
97865	28763	
97866	16153	
97869	10623	
97940	99180	
97960	43901	
97989	64890	
98100	40641	
98101	40650	
98104	40650-5	
98105	40641-5	
98107	41080	
98127	41160	
98136	40650	
98137	40641	
98153	41121	
98165	41133	
1001D	45022	
10028R	45072	
10028Y	45073	
10050R	47472	
10050Y	47473	
10051R	47202 + 66840	
10075R		47232 + 91400 + 66840
10075Y		47233 + 91400 + 66840
10076R		47232 + 91400 + 66850
10076Y		47233 + 91400 + 66850
10079R		47372 + 66840
10079Y		47373 + 66840
10085R		47232 + 91400 + 66850
10085Y		47233 + 91400 + 66850
10086R		47232 + 91400 + 66850
10086Y		47233 + 91400 + 66850
10089R		47373 + 66850
10089Y		47373 + 66850
10090R		47232 + 91400 + 66850
10090Y		47233 + 91400 + 66850
10091R		47372 + 66850
10091Y		47373 + 66850
10092R		47232 + 43162 + 66850
10092Y		47233 + 43162 + 66850
10202C	45811	
10202R	45812	
10202Y	45813	
10203R	45322	
10203Y	45323	
10209C	45811	
10212Y	78343	
10213Y	78343	
10250R	47122	
10250Y		47123 + 67001
10251R		47122 + 43160

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
10251Y		47123 + 43160
10275R	47232	
10275Y	47233	
10276R	G3092	
10276Y	47223	
10279R	47372	
10279Y	47373	
10286R	46142	
10286Y	46143	
10288Y		47423 + 66840
10289R		47372 + 66840
10289Y		47373 + 66840
10379R	47372	
10379Y	47373	
10389R	47372	
10389Y	47373	
10391R		47232 + 43162
10391Y		47233 + 43162
1050A	G1033	
10519R	45042	
10519Y	45043	
1051A	G1043	
10520R		93750 + 45812 + 67050
10525R	45072	
10525Y	45073	
1052A	G1003	
1058-3	47122-3	
1058A	47123	
1058A-3	47123-3	
1070A	47373	
1071A	47373	
10744R	49142	
1075A	G1083	
1155A	G5053	
1203A	46783	
1211A	46793	
1211W	46791	
1213A	46793	
1222A	45933	
1233A	45463	
1259A	45263	
1264A	45933	
1312A	45333	
1320AD	46543-5	
14200R	45232	
14200Y	45233	
15006R	43370	
15006Y	43370	
15008R	43380	
15008Y	43380	
15011UB	60280	
15050R	49182	
1507A	46883	
15200C	60271	
15200R	46412	
15200Y	46413	
15201R	45162	
15201Y	45163	
15208UB	60261	
1520A	45513	
15250R	47082	
15250Y	47083	
15506R	45082	
15506Y	46422-5	
1555A	45253	
1560A	G1503	
1570A	46393	
15741R	49172	
15745R	49172	
18300Y		45713
19200C	60301	
19200R	46742	

**TRUCK-LITE®-TO-GROTE®
INTERCHANGE**

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
19200Y	46743	
19205Y	78393	
19250R	47092	
19250Y	G1903	
19275R	47492	
19275Y	47493	
19350R		47492
19350Y		47093 + 66981
19375Y		G1903
1960A	G1903	
21002R	46082	
21002Y	46083	
21051R		47072 + 66910
21051Y		47073 + 66910
21201R	46072	
21201Y	46073	
21210Y	78363	
21251R	47072	
21251Y	47073	
21271R		54002 + 66815
21275R	47162	
21275Y	47163	
21506R		46832 + 66910
21506Y		46833 + 66910
21507R		46872 + 66910
21507Y		46873 + 66910
2150A	G2103	
21880R	47072	
21880Y	47073	
22002R		53062 + 66905
22002Y		52193 + 66843
22004Y		53063 + 66905
22006Y		53063
25250Y	47063	
25750Y	47063	
25760Y	45503	
25761Y	46813	
25765Y	46913	
25766Y	46913	
26311R	46282	
26311Y	46283	
26315R	45172	
26315Y	45173	
263-4	44860	
26394C	60361	
2660A	G4603	
26741R	49002	
26760Y	45993	
26762Y	92773	
26765Y	46543	
27270C	90941-5	
27450C	90951-5	
27640C	94421-5	
27645C	94411-5	
29004C		60331 + 66911
29202R	45442	
29202Y	45443	
29204C	60331	
30075R		46132 + 92120 + 67050
30075Y		46133 + 92120 + 67050
30085R		46132 + 92120 + 67050
30085Y		46133 + 92120 + 67050
30086Y		47113 + 92120 + 67050
30090R		46132 + 42180 + 67050

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
30090Y		46133 + 42180 + 67050
30091R		G3002 + 43150 + 67050
30091Y		G3003 + 43150 + 67050
300A	77103	
30200C	45821	
30200R	45822	
30200Y	45823	
30201R	47102	
30201Y	47103	
30204R	45822	
30204Y	45823	
30222R		45822 + 43150
30230Y	78333	
30257Y	78333	
30264Y	78433	
30269Y		78433 + 43150
30272R		47112 + 43150
30272Y		47113 + 43150
30276R	47212	
30276Y	47213	
30277R		47112 + 43152
30277Y		47113 + 43152
30279R		46142 + 67050
30279Y		46143 + 67050
30286Y	77193	
30288R		G3002 + 43152 + 67050
30288Y		G3003 + 43152 + 67050
30289R		G3002 + 43152 + 67050
30289Y		G3003 + 43152 + 67050
30375R		46132
30375Y	46133	
30379R		46132 + 43150 + 67050
30379Y		46133 + 43150 + 67050
30503R	45062	
30503Y	45063	
3050A	G3003	
3058-3	47112-3	
3058A	47113	
3070A		G3003 + 43150
30740R	49142	
3075A	G3093	
307A	77103	
307B	77105	
307R	77102	
328d	73140-5	
329d	73150-5	
33010C	60721	
33050R	49322	
33050Y	49323	
33075R	49332	
33075Y	49333	
33080R	49332	
33080Y	49333	
33208R		49362 + 42292
33210C	60651	
33250R	49332	
33250Y	49333	
33260Y	49323	
35001R	65512	
35001Y	65513	
35080R	47242	
35080Y	47243	
35200R	47242	
35200Y	47243	
35375R	47462	
35375Y	47463	

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
35740R	49122	
35880R	47242	
35880Y	47243	
36041C	60781	
36042C	60701	
36115R		47972
36115Y		47973
36140C	60691	
36203R		49382
36203Y		49383
3754D	50642	
3756D	50642	
3850AA	55223	
40002R	52782	
40002Y		52773 + 91740 + 67000
40006R		52770 + 91740 + 67000
40009R		52152 + 67000 + 91740
40015R		52672 + 67000 + 91740
40028R	52782	
40042R	52782-3	
40202R	52922	
40202R3	52772-3	
40202Y	52773	
40206R	52770	
40209R	52152	
40215R	52672	
40226R		52672 + 92510
4023Y106	52902	
40242R	52772	
40242R3	52772-3	
40242Y	52773	
40248R	52672	
4024Y106	52912	
40282R	52922	
40282Y	52923	
40285R	52672-3	
4051A	G4023	
4058-3	54342-3	
4060C	62691	
4091A	52063	
4094A		52063 + 66905
4095A		53063 + 66905
41a	40233	
433WD	60151	
434WD	61501	
43a	40193	
44002R		53253 + 66830
44022R		53272 + 67002
44036R		53292 + 67002
44092Y		54313 + 92512
44093Y		54313 + 92510
44094Y		54313 + 91740
44095Y		54313 + 92511
44101R	77352	
44101Y	77353	
44102R		77352 + 91740 + 67002
44102Y	77353	
44103R	77352	
44103Y	77353	
44104R	77352	
44104Y	77353	
44110Y	77353	
44114Y	77353	
44144Y	77353	
44181C		62101 + 92511 + 66862
44182C		62101 + 92512 + 66862
44202R	53312	

**TRUCK-LITE® -TO- GROTE®
INTERCHANGE**

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
44211R	77352	
44211Y	77353	
44212R	77352	
44212Y	77353	
44213R	77352	
44213Y	77363	
44214R	77352	
44214Y	77353	
44217Y	77353	
44218Y	77353	
44231Y		53282 + 67002
44248Y	77353	
44249Y	77353	
44253R		52092 + 67002
44291Y		54313 + 92512
44292Y		54313 + 92510
44293Y		54313 + 91740
44294Y	54313	
44295Y		54313 + 92511
44302R	53552	
44331R	53272	
44344C		62101 + 92511 + 66862
44345C		62101 + 92510 + 66862
44346C		62101 + 92512 + 66862
44348C		62101 + 92512 + 66862
44349C		62101 + 92510 + 66862
44350C		62401 + 67013
44350R	53532	
44355R	54332-3	
44361R	54622	
44438C	61171	
44882R	53552	
44982R	53552	
44991C		62101 + 92511
44992C	62791	
45002R		52203 + 94180 + 67090
45002Y		52203 + 94180 + 67090
45051R		G4502 + 94180 + 67000
45201Y	52203	
45202R	52202	
45202Y	52203	
45a	41003	
49002R	53112	
49003C	62121	
49202R	53102	
49203C		62121 + 91740 + 67013
5015K	53722	
5050DK	65320-5	
5051DK	65330-5	
50-60202R-3	52182-3	
50-60202Y-3	52183-3	
52a	41013	
5315Y101	53762	
533DK	65230-5	
534D	52312-5	
535D	52302-5	
54a	41033	
60002R	52572	
60004C	62251	
60015Y	52253	
60050R	53122	
60052R		53592 + 66830

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
60056R		53622 + 66830
60072Y		53593 + 66830
60075Y	53123	
60083R	53092	
60083Y	53093	
60085R	53122	
60115Y		54183 + 66830 + 92420
60120R	77362	
60120Y	77363	
60122R	77362	
60122Y	77363	
60124R	77362	
60124Y	77363	
60126R	77362	
60126Y	77363	
60201R	52182	
60201Y	52893	
60202R	52182	
60202Y	52183	
60204C	62521	
60215Y	52193	
60250R	53962	
60252R	53592	
60256R	53622	
60272Y	53593	
60275Y	53963	
60276Y	53623	
60283R	52182	
60283Y	52183	
60315Y	54193	
60317Y	54213	
60360R	77362	
60360Y	77363	
60362R	77362	
60362Y	77363	
60364R	77362	
60364Y	77363	
60366R	77362	
60366Y	77363	
60420Y	54213	
60421Y	54193	
6050A	G6003	
6051A	G6013	
6053-3	53592-3	
6053A	53593	
6058-3	G6002-3	
6058A	G6003	
6058A-3	G6003-3	
6060C	62751	
6063C3	62601-3	
60872Y	53593	
60885R	53962	
60891Y	53963	
612W	63531	
620W	64101	
620W4	64921	
629W4	63181-5	
630W	64931	
630W4	64101	
633W	64991	
6503A	56073	
6600A	78033	
66050R		53962 + 66830 + 92420
66052R		53592 + 66830
66056R		53622 + 66830
66206C		62051 + 43222
66252R	53592	
66256R	53622	
6660PS		77931
66882R	53592	
69202Y	52533	

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
70310R	50642	
7044D	12014-5	
7044DB	12014	
7048D	12164-5	
7048DB	12164	
80162C	61991	
80250C	61291	
80251C	61E51	
80251C3	61E61-3	
80255C	61F61	
80255C3	61F61-3	
80302R	50222	
80322R		90013 + 50222
80324R	50532	
80334R	50232	
80335R	52522	
80339R	50502	
80423C	60311	
80462R	50862	
80463R	50852	
81335C	64M11-5	
8180-3	63G01	
8370A		77931
8370B		77931
8370R		77931
8370W		77931
8861A	99913	
8933A	90203	
8938A	91503	
9004A	90303	
9005A	90053	
9005W	90051	
9006A	91963	
9007A	91963	
9007G	91964	
9007W	91961	
9016A	91583	
9016W	91581	
9021A	91583	
9029A	90013	
9029W	90011	
90327R	50132	
9040A	92173	
9057A	91993	
9063A	91503	
9078A	91503	
9079A	91503	
9080A	91513	
9093A	90123	
9093W	90121	
91241Y	55983	
91242R	53422	
91243Y	55993	
91244R	53422	
91315Y	54343	
92525Y	76713	
92530Y	77323	
92531Y	77323	
92534C	77101	
92534Y	77103	
92550Y	77353	
92551Y	77363	
92552Y	77353	
92554Y	77013	
92600Y	76223	
92602Y	76033	
92642Y	76983	
92644Y	76993	
92646Y	76993	
92695R	77462	
92695Y	77463	
92696R	77462	
92696Y	77463	

TRUCK-LITE®-TO-GROTE® INTERCHANGE

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
92865Y	77813	
92870B	77465	
92870C	77461	
92870R	77462	
92870Y	77463	
92WD	62021	
9341A	90233	
94902UB	67050	
94902-UB	66850	
94993UB	67090	
98006r	40152	
98006y	40153	
98031r	41042	
98031y	41043	
98154r	41122	
98175r	41142	
98175y	41143	
98176r	41152	
98176y	41153	
99007C	90761	
99007R	90232	
99007Y	90233	
99008C	91311	
99008R	90012	
99008Y	90013	
99009Y	90233	
99039Y	90303	
99041R	90152	
99041Y	90153	
99066Y	92773	
99090Y	90233	
99095C	90221	
99167Y	90103	
99168R	99842	
99168Y	99843	
99169R	99832	
99169Y	99833	
99170R	99802	
99170Y	99803	
99171R	99912	
99171Y	99913	
TL00801	43690	
TL10202R	45812	
TL10202Y	45813	
TL10205R	45832	
TL10205Y	45833	
TL10212Y	78343	
TL10250R	47122	
TL10275Y	47233	
TL10279Y	47373	
TL10379R	47372	
TL10379Y	47373	
TL1050	G1032	
TL1050A	G1033	
TL10700	91410	
TL10708	92920	
TL10738	43690	
TL1075	G1082	
TL1075A	G1083	
TL1203	46782	
TL1211	46792	
TL1211A	46793	
TL15011	60280	
TL15200Y	46413	
TL15205	60421	
TL1560	G1502	
TL1560A	G1503	
TL15728	43380	
TL19200C	60301	

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
TL19200R	46742	
TL19200Y	46743	
TL19205Y	78393	
TL19250Y	G1903	
TL1960	G1902	
TL1960A	G1903	
TL19721	43850	
TL21002R	46082	
TL21002Y	46083	
TL21201R	46072	
TL21275Y	47163	
TL2150	G2102	
TL2150A	G2103	
TL22202Y	53063	
TL2660	G4602	
TL2660A	G4603	
TL2750	G5300	
TL29203R	46872	
TL29203Y	46873	
TL30200R	45822	
TL30200Y	45823	
TL30230Y	78333	
TL30250R	47112	
TL30257Y	78333	
TL30375Y	46133	
TL30404		93750 + 67050
TL3050	G3002	
TL3050A	G3003	
TL3075A	G3093	
TL33050R	49342	
TL33050Y	49343	
TL33075R	49332	
TL33203R	49362	
TL33250R	49332	
TL33250Y	49333	
TL35001R	65512	
TL35001Y	65513	
TL40002R	52782	
TL40202R	52772	
TL40282R	52922	
TL40282Y	52923	
TL4050	G4002	
TL4050A	G4003	
TL4051A	G4022	
TL4060C	62691	
TL4095	66905	
TL44030R	53462	
TL44102Y	77353	
TL44211Y	77353	
TL44302R	53552	
TL44322R	53292	
TL44355R	54332-3	
TL45202R	52202	
TL45202Y	52203	
TL4550	G4502	
TL60015Y	52253	
TL60050R	53122	
TL60120R	77362	
TL60120Y	77363	
TL60202R	52892	
TL60215Y	52193	
TL60250R	53962	
TL6050	G6002	
TL69202Y	52533	
TL80251C	61E51	
TL80520	63531	
TL9049	91302	
TL9079A	91503	
TL9080A	91513	
TL92560	77013	
TL93745	66931	
TL94862	66930	
TL94897	66831	

Truck-Lite® PN	Grote® Form, Fit & Function	Grote® Fit & Function
TL94902	67050	
TL94992	67010	
TL94993	67090	
TL96930	66360	
TL98006R	40152	
TL98006Y	40153	
TL98031Y	41043	

PETERSON®-TO-GROTE® INTERCHANGE

Peterson® PN	Grote® Form, Fit & Function	Grote® Fit & Function
45	43424	
294	G6151	
335	50630	
367	61871	
368	61861	
400	60001	
415	62271	
425	50232	
428	50852-3	
435	60151	
438	60101	
445	50920	
449	71422	
454	50992	
459	71152	
500	48272	
554	44810	
557	44820	
570	44530	
571	44540	
572	44891	
573	44690	
574	44700	
576	44710	
577	44720	
598	18302-5	
605	28032	
608	12182	
609	12071	
615	16244	
616	16092	
654	28032	
711	63821	
780	73080	
781	73080	
782	73030	
784	73030	
785	73080	
810	28323-5	
821	28093-5	
830	12243-5	
832	12113-5	
833	12263-5	
836	12263-5	
845	G5202	
2593	42180	
2594	42180	
4223	G6013	
4224	G4002	
4469	65513	
4470	65512	
5000	44030	
5100	44010	
5124	44010	
100-15A	90163	
100-15R	90162	
107-15A	92433	
107-15R	92432	

**PETERSON®-TO-GROTE®
 INTERCHANGE**

Peterson® PN	Grote® Form, Fit & Function	Grote® Fit & Function
107-3R	49112	
107WA	46883	
107WR	46882	
108-15A	90203	
108-15R	90202	
108WA	46713	
108WR	46712	
110-15A	90303	
110-15R	90302	
118-15A	91683	
119-15A	90053	
119-15R	90052	
119A	45173	
119R	45172	
1200R	47912	
120-49	68380	
1217R-9	53552	
123A	46283	
123R	46282	
124-15A	90923	
124-15R	90922	
127-18	93402	
127-181	93400	
130-25A	91043	
130-25R	91042	
134-15A	90123	
134-15R	90122	
135A	45263	
135R	45262	
136-15A	90153	
136-15R	90152	
136-3R	49062	
136A	45253	
136R	45252	
138-15A	91963	
138-15R	91962	
138A	46793	
138R	46792	
142-09	93750	
142-18	91410	
142-18K	94000	
142-49	67050	
142A	45813	
142KA	45043	
142KR	45042	
142R	45812	
143-092	43512	
143-18	91400	
143-18K	94010	
143A	45833	
143R	45832	
144-18	92920	
146-09	93760	
146-092	43532	
146-18	92120	
146-182	92150	
146A	45823	
146R	45822	
150-09	94233	
150-091	42141	
150-095		94233
150-10	94233	
150-13	94233	
150-14	43960	
150-141	43962	
150-3R	49172	
150-49	66932	
150A	46413	
150C	60261	

Peterson® PN	Grote® Form, Fit & Function	Grote® Fit & Function
150R	46412	
152-09	94233	
152-091	94233	
152-10	94233	
152-49	67315	
153-09	94233	
153-49	67001	
153A	47083	
153C-142		60671 + 43970
153C-143		60671 + 94233
153C-BT2	60671	
153R	47082	
154-09K	43850	
154-10K		43783 + 66981
154A	46743	
154C	60291	
154KA	45093	
154KR	45092	
154R	46742	
155R	46832	
160-09	43120	
160-49	66930	
160-491	66930	
160-493	66932	
161A	47093	
161KA	65203	
161R	47092	
162-49	67001	
162-493	66851	
162A	47123	
162R	47122	
162Y	G1033	
163A	G1033	
163FA		G1033 + 42170
163FR		G1032 + 42170
163KA		G1033 + 91400 + 67001
163KR		G1032 + 91400 + 67001
163R	G1032	
164A	47113	
164R	47112	
165-10	43690	
165R	G3002	
166A	G3093	
166R	G3092	
168R	45002-5	
173A	G1003	
173R	G1002	
174A	47113	
176-10	42110	
176-11	42292	
176-12	42282	
176-14	42302	
176-16	42312	
176A-BT2	49333	
176BKA		49333 + 42110
176BKR		49332 + 42110
176R-BT2	49332	
188A	G2103	
188R	G2102	
192-492	66862	
19-41	44421	
196A	47123	
196R	47122	
198A	47113	
198R	47112	
2636A		46413 + 91380 + 67050
2636R		46412 + 91380 + 67050
290C	60701	
313-2	53052	

Peterson® PN	Grote® Form, Fit & Function	Grote® Fit & Function
313-2RA	53000	
313AA	53023	
318L		56160-5 + 56180-5
318L-P		56160-5 + 56180-5
318R		56160-5 + 56180-5
318R-P		56160-5 + 56180-5
319AA	56150	
319R	56180-5	
319R-P	56180-5	
326-2	55470	
344-49	66861	
352A	52193	
410-21	99595	
411-07	68170	
413-07	68130	
414-15C	91311	
415K	62221	
417-2	43642	
417-48	66862	
417-481	66860	
417-49	66861	
417-491	66860	
417-491MP	67006	
417-493	67006	
418R-3P		54572 + 66861
420C-5P		62561 + 66842
420KR-5		53962 + 92420 + 66830
420R-5P		53962 + 66830
421-09	43362	
421-19	67014	
421-49	67014	
421-491	67090	
421-491Y	66810	
421A	52183	
421KR	52572	
421R	52182	
423C-5P		62561 + 43222 + 66842
423R-5	53622	
423R-5P		53622 + 66830
424-09	92512	
426-09	43572	
426-10	43655	
426A	52923	
426KR	52782	
426R	52922	
431-49	67010	
431-491	67000	
431A	52773	
431KR	53012	
431R	52922	
436-01	93610	
440-15	92792	
440L	52312	
445-25	91302	
4523-49	66870	
464-1	41050	
464-2	41050	
465-1	41160	
465-2	41160	
465-4K	40650-5	
465K	40650-5	
467-1	40641	
467-4K	40641-5	
469-1	41133	
505K	64261-4	
510-9	43112	
55-15A	91113	
55-15R	91112	

**PETERSON®-TO-GROTE®
 INTERCHANGE**

Peterson® PN	Grote® Form, Fit & Function	Grote® Fit & Function
608X		
608XO	12183	
616W	12293	
617X	16091	
654X	16023	
658X	28033-5	
667X	12272-5	
672X	26012-5	
701C	28493	
702C	90941-5	
703C	94421-5	
717A	94411-5	
717R	55993	
786-102	55982	
786-97	73160	
786-97	73220	
817KCR-3		01-5325-83 + 67006
817KR-3		53552 + 91740 + 67006
817R-36	54562	
817R-7	53552	
817TA-2	54363	
818KR-3		53292 + 91740 + 67006
818R-2		53292 + 67006
818R-3		53292 + 67006
820R-10	54142	
820R-2		53962 + 67006
821A-10	G6003	
821A-7	G6003	
821R-7	G6002	
822R-3		G6002 + 43222
824R-3		G4002 + 92512
826A-7	G4003	
826C-7	62691	
826R	54342	
826R-7	G4002	
826R-9	G4002	
845L	G5212	
850R-1		G4502 + 67000
850R-1P		G4502 + 67000
909-MV	63981	
911-MV	63861	
912-MV	BZ111-5	
917-MV	63F51	
B107-15A	92433	
B107-15R	92432	
B1200-09X	93453	
B127-18	94180	
B134-15A	90123	
B134-15R	90122	
B138-15C	91961	
B142-49	67050	
B142-50	67001	
B142-51	67001	
B146-09	93760	
B146-093	93760	
B146-182	92150	
B146-49	66932	
B150-095		94233
B150-141	43962	
B150-141B	43262-3	
B150-142	43962	
B150-143	43962	
B150-18	91380	
B150-181	91380	
B150-491	67120	
B152-49	67400	
B153-49	66981	
B153-492	66981	

Peterson® PN	Grote® Form, Fit & Function	Grote® Fit & Function
B153-493	66982	
B154-092	43230	
B154-11	43780	
B154-11K	43780	
B160-49	66930	
B160-491	66930	
B160-492	66931	
B162-49	67001-3	
B162-493	66851	
B167-09	43780	
B167-49	66981	
B167-491	43780	
B167-492	66801	
B168-092	43120	
B168-092B	43120	
B168-093	43780	
B168-181	43120	
B177-18	60-1084-03	
B193-492	66826	
B2412	66932	
B2712	66932	
B388-09X	93453	
B411-07	68170	
B413-07	68130	
B417-49	66861	
B417-491	66860	
B417-496	66860	
B418-10	92513	
B421-18	92420-3	
B421-19	67014	
B421-49	67014	
B421-491	67090	
B426-18	91740-3	
B431-491	67000	
B450-18	94180-3	
B460A	40193	
B460R	40192	
B474A	40073	
B474R	40072	
B476A	40153	
B476R	40152	
B477A	40093	
B477R	40092	
B479A	41043	
B479R	41042	
B481A	40073	
B481R	40072	
B484A	40303	
B484R	40302	
B485A	40303	
B485R	40302	
B489A	40303	
B489R	40302	
B492A	40133	
B492R	40132	
B5425Y	68420	
B570	44540	
B7005S	43153	
B7007S	43823	
B817-48	68580	
B850-18	94180-3	
M102A	45413-3	
M106A	45933-3	
M112A	46393	
M114R	46982-5	
M120A	99913	
M120R	99912	
M122XA	46893	
M122XR	46892	
M125A	47053	
M125R	47052	
M126A	47053	
M126R	47052	

Peterson® PN	Grote® Form, Fit & Function	Grote® Fit & Function
M127A	45233	
M127R	45232	
M130A	46303-3	
M130R	46302-3	
M135A	45263-3	
M135R	45262-3	
M136A	45253-3	
M138C	46791	
M146C	45821	
M150W	60271	
M153C-BT2	60671-3	
M154C	60291-3	
M160A	47463-3	
M160R	47242-3	
M162R	47122-3	
M164A	G3003-3	
M164R	G3002-3	
M171C	49341-3	
M181A-BT2	49333-3	
M181R-BT2	49332-3	
M196R	47122-3	
M196Y	G1033-3	
M197A	47233-3	
M198A	G3003-3	
M198R	G3002-3	
M2875AF-P	53623	
M290C	60381-3	
M294	G6151	
M360	61261	
M360-BT2	61261	
M365	61F61-3	
M367	61871-3	
M393C	62291	
M400	60001-3	
M411SC	62151	
M417R	53532	
M418R	53182	
M420C-5		62561 + 66842
M420C-5AMP		62561 + 67006
M420C-5P		62561 + 66831
M420C-5PKD		62561 + 67006
M420R-P	G6002-3	
M421R	52892-3	
M423C-5AMP		62561 + 43222 + 67006
M423C-5P		62561 + 43222 + 66831
M423TA-2AMP		53623 + 66815
M423VC-1P		62751 + 43222
M426R	52772-3	
M431KC	62221	
M431KR	52782-3	
M431R	52772-3	
M434	61501	
M435	60151	
M436B	60081	
M507	64931	
M525	63531	
M821A-10	G6003-3	
M821A-7	G6003-3	
M821R-7	G6002-3	
M826C-7	62691-3	
M826R	54342-3	
M826R-7	G4002-3	
M826R-9	G4002-3	
PM-ECK-T	99170	
PMV0099PT	99580	
V106-09	43673	
V114A	46983-5	
V126A	47053	
V143R	45832	
V153KC-MV		60671 + 43970
V171C	49341	

**PETERSON®-TO-GROTE®
INTERCHANGE**

Peterson® PN	Grote® Form, Fit & Function	Grote® Fit & Function
V25900-09	43272	
V294	G6151	
V313-2RA	55280	
V369S	60591	
V379S	61171	
V421R	52182-5	
V423XR-4	52592-5	
V426R	52922-5	
V428	50852	
V428S	50862	
V434	61501-5	
V437	60251	
V440L	52312-5	
V456	52482	
V456L	52492	
V472A	40233	
V472R	40232	
V475A	40063	
V475R	40062	
V480A	41033	
V480R	41032	
V483A	40303	
V483R	40302	
V487A	40133	
V487R	40132	
V490A	40053	
V490R	40052	
V500	48272	
V520-40	44840-5	
V5325	68540	
V540	65370-5	
V5425Y	68420	
V570	44530	
V582-2	64371-5	
V599	12312-5	
V600	12201-5	
V602	12164	
V603	12004-5	
V603B	12004	
V603L	12014	
V604	12312-5	
V7004	43153	
V7005	43153	
V7007	43163	
V7009	92513	
V7010	42153	
V7011	42153	
V780	73080	
V781	73080	
V783	73080	
V845	G5082-5	
V904-MV	BZ601-5	
V910-MV	BZ201-5	
V911-MV	BZ101-5	
V940	65330-5	

**PRIMATRONICS®-TO-GROTE®
INTERCHANGE**

Primatronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
PT1000A	45813	
PT1000A-ABS	78343	
PT1000BK	43512	
PT1000G	91410	
PT1000GK	94010	
PT1000R	45812	
PT1000R-Kit	45042	
PT1000W	45811	
PT1001BK	42180	
PT1002BK		43690
PT1002G	91400	
PT1003BK		42180 + 67050
PT1004G	91410	
PT100A-Kit	45043	
PT1050R	49142	
PT1100A	45833	
PT1100R	45832	
PT1300A	45333	
PT1500A	46413	
PT1500BK		42131
PT1500L	60261	
PT1500R	46412	
PT1500W	60271	
PT1550R	49172	
PT1900A	46743	
PT1900BK	43850	
PT1900L	60291	
PT1900R	46742	
PT1900W	60301	
PT2100A	46083	
PT2100R	46082	
PT2102A	46873	
PT2102R	46872	
PT2110C	60331	
PT2200A	53063	
PT2200R	53062	
PT2601A	45263	
PT2601R	45262	
PT2602A	46793	
PT2602R	46792	
PT2603A	45933	
PT2603R	45932	
PT2605A	46893	
PT2605R	46892	
PT2610A		45233
PT2610R		45232
PT2615A	46783	
PT2615R	46782	
PT2630A	45253	
PT2630R	45252	
PT2640A	46883	
PT2640R	46882	
PT2650A	46893-5	
PT2650R	46892-5	
PT2660R	49112	
PT2700L	60151	
PT2701L	42162	
PT2702L	43960	
PT2703L	60460	
PT2704L	60101	
PT3000A	45823	
PT3000A-AB S	78333	
PT3000A-Kit	45063	
PT3000AS		45813 + 42180
PT3000BK	43532	
PT3000G	92120	
PT3000GK	94100	
PT3000R	45822	
PT3000R-Kit	45062	
PT3000RS		45812 + 42180

Primatronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
PT3000W	45821	
PT3300A	47103	
PT3300R	47102	
PT4000A	52923	
PT4000BK	43572	
PT4000G	91740	
PT4000MA	53103	
PT4000MR	53102	
PT4000R	52922	
PT4000R-Kit	53012	
PT4000W	62271	
PT4002G	91950	
PT4100R	52672	
PT4200BK	51090	
PT4200L	51032	
PT4200R	51022	
PT4200U	51052	
PT4212RF	50232	
PT4212RF-LN	90012	
PT4500A	52203	
PT4500BK	43212	
PT4500G	94180	
PT4500R	52202	
PT4706P	66860	
PT4707P	68580	
PT4902P		67050
PT4924P	67050	
PT4925P	67010	
PT4926P	67000	
PT4992P	67014	
PT4993P	67090	
PT4999P	67010	
PT5001A		77473
PT5001A-FT		92980
PT5001A-LN		92033
PT5005A	77013	
PT5005A-FT	92960	
PT5110		73040
PT5175		73250
PT5199		73030
PT5315A-FT	90900	
PT5412		44810
PT5413		44820
PT5453		44530
PT5454		44540
PT5469		44690
PT5471		44710
PT5481		44720
PT6000A	52183	
PT6000BK	43362	
PT6000G	92420	
PT6000R	52182	
PT6000R-Kit	53092	
PT6000W	62521	
PT6002G	92720	
PT6106P	67013	
PT6107P	67002	
PT6500A	52193	
PT8005	61821	
PT8010	91302	
PT8020	52442	
PT8021	52452	
PT8428	50872	
PT8428S	50892	
PT8428W	50882	
PT8620	53000	
PT9805A	40053	
PT9805R	40052	
PT9806A	40153	
PT9806R	40152	
PT9807A	40093	
PT9807R	40092	
PT9808A	40073	

**PRIMATRONICS®-TO-GROTE®
INTERCHANGE**

Primatronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
PT9808R	40072	
PT9832A	41033	
PT9832R	41032	
PTL1004A		G1033
PTL1004R		G1032
PTL1013A		G1033
PTL1013R		G1032
PTL1108A	G1003	
PTL1108R	G1002	
PTL1313A		G1083
PTL1313R		G1082
PTL1503A	G1503	
PTL1503R	G1502	
PTL1508W	60421	
PTL1550R	49182	
PTL1912A	G1903	
PTL1912R	G1902	
PTL1912W	60301	
PTL2002C		G6151
PTL3004A		G3003
PTL3004R		G3002
PTL3009A	G3003	
PTL3009R	G3002	
PTL3309A	G3093	
PTL3309R	G3092	
PTL3507A		47243
PTL3507R		47242
PTL3606A		47243
PTL3606R		47242
PTL4010A		G4003
PTL4010R		G4002
PTL4018A		G4003
PTL4018R		G4002
PTL4019W		62691
PTL4040A		G4003
PTL4040AF		G4003 + 92512
PTL4040R		G4002
PTL4040RF		G4002 + 92512
PTL4040W		62691
PTL4048A		G4003
PTL4048R		G4002
PTL5020		63611
PTL5021	64931	
PTL5030		63G11
PTL5040		63G01
PTL5313A		G4603
PTL5313R		G4602
PTL5505A		45583
PTL5915A		47253
PTL6010A		G6003
PTL6010R		G6002
PTL6027W		62751
PTL6056A	G6003	
PTL6056R	G6002	
PTL8000		G5082
PTL8001		G5092
PTL8020		53662
PTL8020K		65230-5
PTL8021		53672
PTL8620		G5300
PTM0105	12164	
PTM09109	12312-5	
PTM9102	12201-5	
PTM9103	12004	
PTM9104	12014	
PTM9205FB	28152	
PTM9205K	28033	
PTM9205WK	28031	
PTM9206	28663	

Primatronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
PTM9206B		12052 + 11303
PTM9206BK		28042
PTM9206K	28043	
PTM9206WK	28041	
PTM9209	16033	
PTM9209B	16032	
PTM9209H		12283 + 11303
PTM9210	12010	
PTM9217		12293
PTM9217B		12182 + 11303
PTM9217H		12283 + 11303
PTM9219		12173 + 11303
PTM9219B		12172 + 11303
PTM9219H		12283 + 11303
PTM9248		28763
PTM9300A	16244	
PTM9310		16023
PTM9310H	16053	
PTM9310HL	16173	
PTM9320	16123	
PTM9320CV	16043	
PTM9320H-L	16223	
PTM9330	16273	
PTM9330B	16142	
PTM9340	16023	
PTM9340H		16053
PTM9340HL		16223
PTM9350	16093	
PTM9350B	16092	
PTM9350W	16091	
PTM9360B	16102	
PTM9360W	16101	
PTM9370	16284	
PTM9420		28453
PTM9460	28093-5	
PTM9706	28323-5	
PTM9710S	22013	
PTM9712	10173	
PTM9714	11303	
PTM9716	11133	
PTM9717	10073	
PTM9718	10173	
PTM9720	10623	
PTM9724		10013
PTM9726		10025
PTM9730		10045
PTM9800	22193	
PTM9809	28443	
PTM9810	28493	
PTM9830	12153	
PTM9840	10433	
PTM9900	29060	

**MAXXIMA®-TO-GROTE®
INTERCHANGE**

Maxxima® PN	Grote® Form, Fit & Function	Grote® Fit & Function
431-491	67000-3	
B431-491	67000-3	
M09100R	G3002	
M09100WCL		60561
M09100Y	G3003	
M09105R	G3092	
M09105Y	G3093	
M09250R-X	G3002-3	
M09250Y-X	G3003-3	
M09300R		49332
M09300R-X		49332-3
M09300WCL		49341
M09300Y		49333

Maxxima® PN	Grote® Form, Fit & Function	Grote® Fit & Function
M09300YAT		49323
M09320R	49332	
M09320R-X		49322-3
M09320Y	49333	
M09320Y-X		49323-3
M09370WCL		77931 + 97942
M09370WCL-NS		60651
M09370Y		77933 + 97942
M09370YCL		77933 + 97942
M09410WCL		49341
M11201R	G1082	
M11201Y	G1083	
M11256R	G1002	
M11256Y	G1003	
M11260R	47232	
M11260Y	47233	
M11300R	G1032	
M11300RCL	G1042	
M11300Y	G1033	
M11300YCL	G1043	
M11350RCL-X	G1042	
M11350R-X	G1032-3	
M11350YCL-X	G1043	
M11350Y-X	G1033	
M16280R	G1032	
M16280Y	G1033	
M16280Y-X		G1092-3
M16800R		G1082
M16800Y		G1083
M20311R	G5052	
M20311Y	G5053	
M20320R	G1502	
M20320Y	G1503	
M20321R		G1502 + 43980
M20321Y		G1503 + 43980
M20323R		49182
M20325		94233
M20328		43980
M20332R	45662	
M20332Y	45663	
M20340R		47242
M20340Y		47243
M20350R	G1902	
M20350Y	G1903	
M20355		43850
M20361Y		47063
M20391R	G2102	
M20391Y	G2103	
M20395R		46832
M20395Y		46833
M23015R		G4602
M23015Y		G4603
M34260R		G3002
M34260Y		G3003
M34600R		G3092
M34600Y	G3093	
M42100R		G4002
M42100Y		G4003
M42120R		G4002 + 92511
M42201R		G4502
M42201Y		G4503
M42213R		G4502
M42213Y		G4503
M42220	G5082	
M42320R		G4002
M42322R		G4002
M42322RCL		G4022
M42322Y		G4003
M42323R		G4002 + 92512
M42323RCL		G4022 + 92512
M42324		62691
M42324-X		62691-3
M42339Y		G4003

**MAXXIMA®-TO-GROTE®
INTERCHANGE**

Maxxima® PN	Grote® Form, Fit & Function	Grote® Fit & Function
M42341R/Y	G5300	
M42344R	54362	
M42346R		54342
M42346R-X		54342-3
M42347		62691
M42347-X		62691-3
M42348		62101
M42348-X		62101-3
M42354R		54602
M42362R/Y-A	G5530	
M42363R/Y-A	G5540	
M42365R	54342	
M42500R		54342
M42500Y		54343
M42701BCL		77355
M42701R		77352
M42701WCL		77351
M42701Y		77353
M43253		43253
M43900	67150	
M49700	94180	
M50100-B	94010	
M50102-X	92070-3	
M50103		43163
M50300-B	92120	
M50310	43673	
M50312		43230
M50400-B	91740	
M50600-B	92420	
M50600-X	92420	
M50605		43223
M50900	67090	
M50900-100	67090-3	
M50900-X	67090	
M50904		66831
M50908		66861
M50909		44070
M50910		99630
M50911	67000	
M50950	67001	
M50950A-100		68551
M50950-X	67001-3	
M50951	66851	
M50951A-100		68551
M50953		66862
M56100R		G4002
M63100R		G6002
M63100Y		G6003
M63201BCL		77365
M63201R		77362
M63201WCL		77361
M63201Y		77363
M63253	43223	
M63253BLK	43222	
M63318R-A	53582	
M63320		62751 + 42152
M63320R		G6002 + 42152
M63320Y		G6003 + 42152
M63321R-X		G6002 + 42152
M63322R		G6002
M63322RCL		G6003-3 + 42152
M63322Y	G6003	
M63322YCL		G6013 + 42152
M63323R		G6002 + 43222
M63323Y		G6003 + 43222
M63323YCL		G6013 + 43222
M63324		62751 + 92420
M63324-X		62751-3 + 92420-3

Maxxima® PN	Grote® Form, Fit & Function	Grote® Fit & Function
M63339Y		G6003
M63339YCL		G6013
M63340YCL		G6013
M63346R		G6002
M63346R-X		G6002-3
M63347		62751
M63347-X		62751-3
M63352R-X		G6002
M63420R		G6002
M63420Y		G6003
M63450R		G6002
M63450Y		G6003
M84415		61611
M84420-B		60581
M84427-A	61861	
M84429-B	61281	
M84444	61E61	
M85615R		54682
M90061R		53422
M90081Y	55983	
MEG-1	99170	
MHL-07HILO	90941-5	
MHL-4x6HI	94411-5	
MHL-4x6LL	94421-5	
MHL-5X7HILO	90951-5	
MPWL-10	BZ501-5	
MPWL-10WALLCH	BZ801-5	
MPWL-20	BZ501-5	
MPWL-20WALLCH	BZ801-5	
MPWL-30WALLCH	BZ801-5	
MWL-01B	BZ101-5	
MWL-01HP	BZ101-5	
MWL-04		63611
MWL-07SP	BZ301-5	
MWL-12	63821	
MWL-16	63F21	
MWL-19	BZ101-5	
MWL-20	BZ601-5	
MWL-21		63611
MWL-24SP	63J21	
MWL-26	63621	
MWL-28	BZ101-5	
MWL-30	BZ201-5	
MWL-31SP	63E21	
MWL-39	63621	
MWL-40	63991	
MWL-50SP	BZ301-5	
V435	60151	

**OPTRONICS®-TO-GROTE®
INTERCHANGE**

Optronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
442	50902	
212767	66200	
00212135P	45853	
00212207B	45793	
00212209B	45792	
00212211B	66200	
00212211P	66200	
00212212B	66200	
00212220P	45793	
00212226P	66200	
00212231B	45763	
00212231P	45763	
00212233B	45762	
00212233P	45762	
00212235P	45773	

Optronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
00212237P	45772	
00212251B	45783	
00212251P	45783	
00212257P	45792	
00212307B	45623	
00212316B	66200	
00212316P	66200	
00212317B	93453	
00212317P	93453	
00212333B	45572	
00212333P	45572	
00212335P	45583	
00212338P	47772	
00212342P	45593	
00212345P	45603	
00212351B	45613	
00212351P	45613	
00212353B		45572
00212353P		45572
00212355P	45623	
00212704P	47913	
00212705P	47912	
00212706P	47923	
00212707P	47922	
442L	50912	
A111GLPBP	42162	
A11AB	92433	
A11ABP	92433	
A11DB	42282	
A11GLPB	42162	
A11RB	92432	
A11RBP	92432	
A2RB	91122	
A2RBP	91122	
A31AB		90203
A31RB		90202
A31RBP		90202
A33GB	94180	
A33GBP	94180	
A38AB	90203	
A38ABP	90203	
A38RB	90202	
A38RBP	90202	
A40RB	90012	
A40RBP	90012	
A40SRB	99595	
A40SRBP	99595	
A45BB	92512-3	
A45BBP	92512	
A45CB	67010	
A45CBP	67010	
A45GB	91740-3	
A45GBP	91740	
A45PB	67000-3	
A45PBP	67000	
A45PMB	66861	
A45PMBP	66861	
A45PS	67000	
A45SBP	43253-3	
A46PB	67050-3	
A46PBP	67050-3	
A46PS	67050-5	
A47PB	67090	
A47PBP	67090	
A47PS	67090-5	
A49PB	67014	
A49PBP	67014	
A54GBP	92120	
A54GKP	94100	
A55GBP	91410	
A56GBP	92070	
A57GBP	91400	
A57GKP	94010	

OPTRONICS® -TO-GROTE® INTERCHANGE

Optronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
A58GB		
A60RBP	91880	
A66PBP	91302	
A68AB	43850	
A68ABP	90153	
A68P		66981
A68RB	90152	
A68RBP	90152	
A70GBP	92420	
A78CB	42153	
A81AB	90923	
A81ABP	90923	
A81RB	90922	
A81RBP	90922	
A8R	92792	
A8RB	92792	
A8RBP	92792	
A91ABP	46413	
A91GB	91380	
A91GBP	91380	
A91LW		67120
A91LWP		67120
A91OB	94233	
A91OBP	92433	
A91RB	46412	
A91RBP	46412	
A93PB	69710	
A93PBP	69710	
A9R	91112	
A9RB	91112	
A9RBP	91112	
A9TB	91112	
AL12GLPB	43962	
AL12GLPBP	43962	
AL45PWTB	66860	
AL45PWTPBP	66860	
AL90AS	G1903-5	
AL90RBP	47082	
AL91RBP	47082	
BK42CB	43673	
BK42CBP	43673	
BK45BBP	43572	
BK53BB		93760
BK53BBP		93760
BK557GB	42180	
BK557GBP	42180	
BK55BB	43512	
BK55BBP	43512	
BK57BB		93750
BK57BBP		93750
BK66DB	43230	
BK66DBP	43230	
BK70BBP	43362-3	
BU31CB	62291	
BU31CBP	62291	
BU33CBP	62381	
BU44CB	62221	
BU44CBP	62221	
BU70CBP	62521	
BUL003CB	62091-3	
BUL003CKB		62091 + 91740
BUL06CBP	62691	
BUL10CBP	62751	
BUL11CB	62691-3	
BUL11CKB		62691 + 67090 + 91740
BUL11CKBP		62691 + 67090 + 91740
BUL11CMBP	62101	

Optronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
BUL16CBP	62691	
BUL23CB	62691-3	
BUL23CBP	62691	
BUL43CB	64971-3	
BUL43CBP	64971	
BUL53CB	62691-3	
BUL53CBP	62691	
BUL53CKB		62691 + 67090 + 91740
BUL53CKBP		62691 + 67090 + 91740
BUL69CB	60581	
BUL72CBGK		61G31 + 92420
BUL72CBGKP		61G31 + 92420
CB11AS	46543-5	
CB11WAB	46543	
CB11WABP		46543
CBL22ABP	G5053	
HLL78LS	94421-5	
HLL79HS	94411-5	
HLL90HLBP	90941-5	
HLL93HLS	90941-5	
IL21CS	61491-5	
IL31CS	61091	
IL91CBP		61821
ILL08COBP	61291	
ILL10CCB	61291-3	
ILL10CCBP	61291-3	
ILL28CMB	61H91-3	
ILL28CMBP	61H91	
ILL28CMGP	61F61-3	
ILL28CMGPBP	61F61	
ILL31CB	61871	
ILL32CBP	61861	
ILL35CB	61871	
ILL71CB	61E81	
LP11CS	60101-5	
LP21CB	60151	
LP21CBP	60151	
LP21CS	60151-5	
LP25SB	43962	
LP25SBP	43962	
LP25SGGBP	43960	
LP26SKB	60460	
LP26SKBP	60460	
LP31CS	61501-5	
LP56CBP	60001	
LP5SB		43272
LP5SBP		43272
LP65CB	60291-3	
LP65CBP	60291	
LP91CBP	60261	
LPL26SKB	60681	
LPL26SKBP	60681	
LPL31CB	G6151	
LPL31CBP	G6151	
LPL31CEZB	G6151	
LPL31CEZBP	G6151	
LPL42CBF	60381-3	
LPL42CBFP	60381	
MC11AB		46883
MC11ABP		46883
MC11RB		46882
MC11RBP		46882
MC21RS	45022	
MC22AB	45023	
MC22ABP	45023	
MC22RB	45022	
MC22RBP	45022	
MC25AB	47103	
MC25ABP	47103	
MC25RB	47102	

Optronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
MC25RBP	47102	
MC27AB	45323	
MC27ABP	45323	
MC27RB	45322	
MC27RBP	45322	
MC31AB		45933
MC31ABP		45933
MC31RB		45932
MC31RBP		45932
MC35AB	46393	
MC35ABP	46393	
MC36ABP	46983-5	
MC36RB	46982-5	
MC36RBP	46982-5	
MC37ABP	46983-5	
MC38AB	45933	
MC38ABP	45933	
MC38RB	45932	
MC38RBP	45932	
MC42AB	46793-3	
MC42ABP	46793	
MC42RB	46792-3	
MC42RBP	46792	
MC42RS	91962	
MC53AB	45823-3	
MC53ABP	45823	
MC53ABSB	78333-3	
MC53ABSBP	78333	
MC53RBP	45822	
MC55ABKP	45043	
MC55ABP	45813	
MC55RB	45812-3	
MC55RBKP	45042	
MC55RBP	45812	
MC57AB	45833-3	
MC57ABP	45833	
MC57RB	45832-3	
MC57RBP	45832	
MC58AS	45413	
MC58RS	45412	
MC65AB	46743-3	
MC65ABP	46743	
MC65ARBP	46740	
MC65RB	46742-3	
MC65RBP	46742	
MC67AB		45093
MC67ABP		45093
MC67RB		45092
MC67RBP		45092
MC68AB	45253-3	
MC68ABP	45253	
MC68AS	45253-5	
MC68RBP	45252	
MC68RS	45253-5	
MC71AS		47053
MC71RS		47052
MC77RB		49062
MC77RBP		49062
MC81AB	46283-3	
MC81ABP	46283	
MC81RB	46282-3	
MC81RBP	46282	
MC82AB	45173	
MC82ABP	45173	
MC82RB	45172	
MC82RBP	45172	
MC90AS	46413-5	
MC90RS	46412-5	
MC93RB	49172-3	
MC93RBP	49172	
MC99RB	49112	
MC99RBP	49112	

**OPTRONICS®-TO-GROTE®
INTERCHANGE**

Optronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
MC99RK	49112-5	
MCC55ABP	45813-3	
MCL111AKPG	49333-3	
MCL111AKPGP	49333	
MCL111RKPG	49332-3	
MCL111RKPGP	49332	
MCL11AHPG	49333-3	
MCL11RHPPG	49332-3	
MCL12RKPG	49322-3	
MCL155ABP	47113	
MCL155RBP	47112	
MCL157ABP	47123	
MCL165ABP	47093	
MCL165RBP	47092	
MCL21ABP	G3093	
MCL21RBP	G3092	
MCL23ABP	G1083	
MCL23RBP	G1082	
MCL299AB	45283	
MCL299RB	45282	
MCL45ABP	G4603	
MCL46ABP	G4603	
MCL46RBP	G4602	
MCL505ABSB		78433 + 43152
MCL505GABSB		78433 + 92120
MCL50AB	G3003-3	
MCL50ABP	G3003	
MCL50RB	G3002-3	
MCL50RBP	G3002	
MCL51AB	47123-3	
MCL51ABP	47123	
MCL51RB	47122-3	
MCL51RBP	47122	
MCL527AFB		47123 + 43162
MCL527AS	G1033-5	
MCL527RB	47122-3	
MCL527RBP	47122	
MCL527RFB		47122 + 43162
MCL527RS	G1032-5	
MCL54AB	46133	
MCL54ABP	46133	
MCL54RB	46132	
MCL54RBP	46132	
MCL55AB	47113-3	
MCL55ABP	47113	
MCL55AKB		G3003 + 67050 + 92120
MCL55FRB	43532	
MCL55RB	47112-3	
MCL55RBP	47112	
MCL55RKB		G3002 + 67050 + 92120
MCL56AB	47113-3	
MCL56ABP	47113	
MCL56AFB		47113 + 43152
MCL56AS	G3003-5	
MCL56RB	47112-3	
MCL56RBP	47112	
MCL56RFB		47122 + 43152
MCL56RS	G3002-5	
MCL57AB	47123-3	
MCL57ABP	47123	
MCL57RB	47122-3	
MCL57RBP	47122	
MCL57RCB	G1042	
MCL57RCBP	G1042	
MCL58AB	46143-3	
MCL58ABP	46143	
MCL58RB	46142-3	
MCL58RBP	46142	

Optronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
MCL59ABP	G1003	
MCL59RBP	G1002	
MCL61ABP	G1903	
MCL61AS	G1903-5	
MCL61RB	G1902-3	
MCL61RBP	G1902	
MCL63ABP	G1903	
MCL63RB	G1902-3	
MCL63RBP	G1902	
MCL65AB	G1903-3	
MCL65ABP	G1903	
MCL65RB	G1902-3	
MCL65RBP	G1902	
MCL66AB	47243-3	
MCL66ABP	47243	
MCL66RB	47242-3	
MCL66RBP	47242	
MCL67RB		G1902 + 43790
MCL67RBP		G1902 + 43790
MCL75AB	G1903-3	
MCL75ABP	G1903	
MCL75RBP	G1902	
MCL76AB	G2103-3	
MCL76ABP	G2103	
MCL76RB	G2102-3	
MCL76RBP	G2102	
RB10A		76033
RB15RBP	40132	
RE10AB	40303	
RE10ABP	40303	
RE10RB	40302	
RE10RBP	40302	
RE11AB	41033-3	
RE11ABP	41033	
RE11RB	41032-3	
RE11RBP	41032	
RE12AK		41033
RE12RK		41032
RE15AB	40133	
RE15ABP	40133	
RE15AK		40133-5
RE15RB	40132	
RE15RK		40132-5
RE18T		40650-5
RE2018T	40650-5	
RE21AB	40053	
RE21ABP	40053	
RE21AS	40053	
RE21RB	40052-3	
RE21RBP	40052	
RE21RS	40052-5	
RE31AS	40233-5	
RE31RS	40232-5	
RE35AB	41013	
RE35ABP	41013	
RE35RB	41012	
RE35RBP	41012	
RE37AB	41003	
RE37ABP	41003	
RE37RB	41002	
RE37RBP	41002	
RE418T		40650-5
RT150WBDP	40641	
RT150Y2BP	41133	
RTR03150711CBP	40650	
RTR1015066CB		41050
RTR1015066CBP	41050	
RTR10150711CBP	40650	
RTR10150WBP	40641	
RTR15066B	41050	
RTR15066BP	41050	
RTR150711B	41160-3	
RTR150711BP	41160	

Optronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
RTR150711BPB	41160	
RVSL21	61793	
RVSL21P	61793	
ST16RB	52482	
ST17RB	52492	
ST24RBP	50862	
ST25RBP	50852	
ST2RB	52442	
ST2RBP	52442	
ST31RB	53132	
ST31RBP	53132	
ST33AB	52203	
ST33ABP	52203	
ST33RBP	52202	
ST3RB	52452	
ST40RB	50232	
ST40RBP	50232	
ST40RS	50232-5	
ST44AB		52923 + 91740 + 67090
ST44RBP	53012	
ST45RGB	53102-3	
ST45RGBP	53102	
ST45RK	53012-5	
ST45RS	52922-5	
ST46RB	52672-3	
ST46RBP	52672	
ST46RKB	52682	
ST46RKBP	52682	
ST4RB	51932	
ST4RBP	51932	
ST52AAP	55223	
ST52RA	55220	
ST52RB	50630	
ST52RBP	50630	
ST56RS	53812	
ST57RS	53822	
ST5RB	51942	
ST5RBP	51942	
ST70ABP	52183	
ST70RB	52892-3	
ST70RBP	52892	
ST70RS	52182-5	
ST74AB	53093	
ST74ABP	53093	
ST74RBP	53092	
ST75ABP	52513	
ST77AB	52253	
ST77ABP	52253	
ST7RBP	53672	
ST8RBP	52302	
ST90RBP	50132	
ST9RBP	52312	
ST9RS	52312-5	
STL002RFB		54172 + 42152
STL003AB	54333	
STL003RFB	54482	
STL003RK		54332 + 66815
STL003RMBP	54362	
STL003SRFLB		52922 + 92512
STL008RB	51982	
STL008RBP	51982	
STL008RPG	51982	
STL008RS	51982-5	
STL009RB	51992	
STL009RPG	51992	
STL009RS	51992-5	
STL101ABP	G4003	
STL101RMBP	53552	
STL12RMBP	54142	
STL13K		54342 + 67090 + 91740
STL13RB	54342-3	

**OPTRONICS®-TO-GROTE®
INTERCHANGE**

Optronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
STL13RBP	54342	
STL13RGBP	53252	
STL13RMB	53552-3	
STL13RMBP	53552	
STL153ARDBBP	G5530	
STL190RBP	53422	
STL201RFMB		55162 + 92512
STL22AB	G6003-3	
STL22ABP	G6003	
STL22RB	G6002-3	
STL22RBP	G6002	
STL22RCBP	G6012	
STL23ABP	G4003	
STL23RB	G4002-3	
STL23RBP	G4002	
STL28RBP	51982	
STL29RBP	51992	
STL33RB	G4502	
STL33RBP	G4502	
STL34RB		52202 + 94180 + 67090
STL35AB	G4503	
STL35RBP	G4502	
STL412RB	54172-3	
STL412RBP	54172	
STL413RB	54342-3	
STL413RBP	54342	
STL413RMB	54362-3	
STL413RMBP	54362	
STL42RMBP	53292	
STL43RB	54342-3	
STL43RBP	54342	
STL43RMB	53252-3	
STL43RMBP	53252	
STL52ARBP	G5300	
STL543AB	G4003-3	
STL543ABP	G4003	
STL543RB	G4002-3	
STL543RBP	G4002	
STL55ABP	G4003	
STL55RB	G4002-3	
STL55RBP	G4002	
STL55RMB	53312-3	
STL55RMBP	54562	
STL572AB	G6003-3	
STL572ABP	G6003	
STL572RB	G6002-3	
STL572RBP	G6002	
STL60RB	G5082	
STL60RBP	G5082-5	
STL6RS	51982-5	
STL70AB	G6003-3	
STL70ABP	G6003	
STL70RB	G6002-3	
STL70RBP	G6002	
STL71AMB	54193-3	
STL71AMBP	54193	
STL72AB	G6003	
STL72ABP	G6003	
STL72RB	G6002-3	
STL72RBP	G6002	
STL72RMB	53962-3	
STL72RMBP	53962	
STL74RBK		G6002 + 67090 + 92420
STL74RBKP		G6002 + 67090 + 92420
STL75AMBP	54213	
STL7RS	51992-5	
STL8RB	51982	

Optronics® PN	Grote® Form, Fit & Function	Grote® Fit & Function
STL90ABP	55993	
STL90RB	55992	
STL90RBP	55992	
STL9RB	51992	
TL10CB	64931	
TL10CBP	64931	
TL10CS	64931-5	
TL15RK	65300-5	
TL27BK	65370-5	
TL29BK	65370-5	
TL5RK	65230-5	
TL6K	65440-5	
TLL22RK		G6002 + 67090 + 92420
TLL45FBP	63861	
TLL46CFB	BZ201-5	
TLL46CFBP	BZ201-5	
TLL48FBP	BZ201-5	
TLL52FB	BZ601-5	
TLL52FBP	BZ601-5	
TLL54TB	63991	
TLL54TBP	63991	
TLL55FB	63991	
TLL55FBP	63991	
TLL60FBP	BZ301-5	
TLL64FB	63F51	
TLL70FB	63L71	
TLL71FB	63991	
TLL71FBP	63991	
TLL9RK	65320-5	
UCL178RFP2B		61G31 + 42152
UCL21CS	64J11	
UCL55CBP	60561	
UCL65CBP	60411	
UL53CB	45821	
UL53CBP	45821	
UL95CB	60271	
UL95CBP	60271	
ULL22CB	64J31	

**AUTOMANN®-TO-GROTE®
INTERCHANGE**

Automann® PN	Grote® Form, Fit & Function	Grote® Fit & Function
564.46059	54233	
564.46068	47063	
577.4601	48522	
571.LD27A16	45583	
571.LD27R16	45582	
571.LG162LB	60081	
571.PT116	67001	

**COLE HERSEE®-TO-GROTE®
INTERCHANGE**

Cole Hersee® PN	Grote® Form, Fit & Function	Grote® Fit & Function
2560	68170	
DL-75-12V	60101	

**ECCO®-TO-GROTE®
INTERCHANGE**

ECCO® PN	Grote® Form, Fit & Function	Grote® Fit & Function
520	73040	
530		73090
575		73090
585		73040
777		73080
3510A		78143
3715A		78143
3730A		78163
3730C		78161
3735A		78163
3735C		78161
3811A		78193 + 98480
5315A	78513	
5545A	77223	
5580CA		76943
5580CA-VM		76953
5590CAC-VM		76990
5590CA-VM		76943
5810A		78123
6225A		78113
6260A	78113	
630N		73250
6410A	78093	
6410A-MG	78103	
6465A	78093	
6550A		78853
6550A-VM		78863
6550C		78851
6570A		78063
6570A-VM		78863
6650A		78853
6670A		78063
6670A-VM		78863
6710A		78853
7160A		78033
7460A		78033
7945A		78853
7945A-VM		78863
7960A		78053
7965A		78033
7965A-VM		78043
7970A		78053
7970A-VM		78053
850N		73070
9014A		77933
9014C		77931
A3730DCK		98360
A3932BZC		98480
A6050BG		98470
EB7180A		78033
EB7185CAC		78071
ED0002C		78161
ED0002R		78162
ED0003C		78161
ED0004A		78163
ED0004C		78161
ED0004R		78162
ED3702AC		78460
ED3766AC		78460
R5812BH	90620	
R6501FT	92970	
SA901		73240
SA950		73110
SA955		73220
SW15	44421	

NAPA® WIRE-TO-GROTE® INTERCHANGE

Napa® Wire PN	Grote® Form, Fit & Function	Grote® Fit & Function
787107	68110	
787125	68080	

PAI WIRE-TO-GROTE® INTERCHANGE

PAI PN	Grote® Form, Fit & Function	Grote® Fit & Function
4197		90303 + 45993
4261	48542	
4263	53052	
4274	45333	
4286	50992	
4287	61031	
4292	46813	
4294		91302
4295	92183	
4298	91583	
4304	61821	
4307	45413	
4997	48402	
5278		G5543-5
5279	G5543-5	
5289	46813	
5313	G4002	

PHILLIPS® -TO-GROTE® INTERCHANGE

Phillips® PN	Grote® Form, Fit & Function	Grote® Fit & Function
22-4321	87110	
22-4621	87111	
22-9621	87023	
24-4321	87110	
24-4621	87111	
30-2051	87171	
30-2071	87172	
30-4321	87100	
30-4621	87101	
30-4920	87170	
30-4921	87170	
30-9620	87101	
30-9624	87101	

TRAMEC SLOAN® -TO-GROTE® INTERCHANGE

TRAMEC SLOAN® PN	Grote® Form, Fit & Function	Grote® Fit & Function
421007	87020	
421010	87110	
421113	87111	
421115	87023	
421129	87100	
421130	87101	
421166	87171	
421167	87172	
421200	87172	
421202	87171	

VELVAC® -TO-GROTE® INTERCHANGE

VELVAC® PN	Grote® Form, Fit & Function	Grote® Fit & Function
590154	87020	
590155	87023	
590156	87110	
590157	87111	
590159	87180	
590160	87100	
590161	87101	
590163	87170	
590165	87171	
590166	87172	
590178	87182	

VSM® -TO-GROTE® INTERCHANGE

VSM® PN	Grote® Form, Fit & Function	Grote® Fit & Function
254	44710	
262	44530	
1010	45812	
1011	45832	
1013	49142	
1015	G1032	
1030	45822	
1035	G3002	
1211	46792	
1500	46412	
1505	G1502	
1900	46742	
1905	G1902	
3305	49332	
4054	53012	
4064	52922	
4440	53552	
4454	G4012	
4464	G4002	
5016	53722	
6054	53092	
6064	52182	
6440	54142	
6454	G6002	
6464	G6002	
7562	90941-5	
9093	91572	
9119	91400	
9122	67050	
9124	67000	
9127	91740	
9128	67090	
9139	92120	
9238	43572	
9375	92583	
9389	43850	
9470	68680	
9526	92420	
44544	G4002	
44644	G4002	
1010A	45813	
1010AD	45813	
1010AK	45043	
1010D	45812	
1010K	45042	
1010KD	45042	
1011A	45833	
1011AD	45833	
1011AK	45073	
1011AKD	45073	
1011D	45832	

VSM® PN	Grote® Form, Fit & Function	Grote® Fit & Function
1011K	45832	
1011KD	45072	
1015A	G1033	
1015AC	G1003	
1015AD	47123	
1015AK	G1033	
1015AKD	47473	
1015D	47122	
1015K	G1032	
1015KD	47472	
1015RC	G1042	
1030A	45823	
1030AD	45823	
1030D	45822	
1035A	G3003	
1035AD	47113	
1035AK	G3003	
1035AKD		47113 + 94100
1035K	G3002	
1035KD		47112 + 94100
1255AX	G4603	
1255X	G4602	
1375A	46813	
1376A	47183	
1500A	46413	
1500AD	45163	
1500D	45162	
1500W	60271	
1505A	G1503	
1505D	47082	
1505W	60421	
1505WD	60671	
1900A	46743	
1900AD	46742	
1900W	60301	
1905A	G1903	
1905D	47092	
2102A	46073	
2105AK	G2103	
2105AKD	49393	
2105K	G2102	
2105KD	49392	
3305A	49333	
3305AD	49323	
3305D	49322	
3305G	60824	
3305W	60651	
3305WD	60721	
3812LE	G5300	
3812LED	G5300	
4054A	52923	
4054AD		52923 + 91740 + 67090
4054C	62171	
4054CD	62221	
4054D	53012	
4064A	52923	
4064AD	52923	
4064D	52922	
4064W	62171	
4064WD	62211	
420W	60001	
44544A	G4003	
44544D	G4012	
4454A	G4012	
4454D	53462	
44644A		G4003 + 91740 + 67090
44644RC	G4022	
4464A	G4003	
4464AD	53253	
4464D	53252	
4464R	G4022	

**VSM® -TO-GROTE®
 INTERCHANGE**

VSM® PN	Grote® Form, Fit & Function	Grote® Fit & Function
4464W	62691	
4464WD	64971	
5016LED	G5092	
6054A	53093	
6054C	62231	
6054CD	62251	
6054D	52572	
6064A	52183	
6064AD	52893	
6064W	62231	
6064WD	62231	
6154A	52253	
6154AD	52892	
6164A	52193	
620W	64931	
6454A	G6003	
6454AD	53123	
6454D	53122	
64644AC	G6013	
64644RC	G6012	
6464A	G6003	
6464AD	53963	
6464D	53962	
6464W	62751	
6464WD	62751	
6554A	54193	
6564A	54193	
7562D	90941-5	
9119D	91400	
9124D	67000	
9127D	91740	
9128D	66843	
9139D	92120	
1255	G4602	
4469		53532 + 52513
1255A	G4603	
3005RC		45772

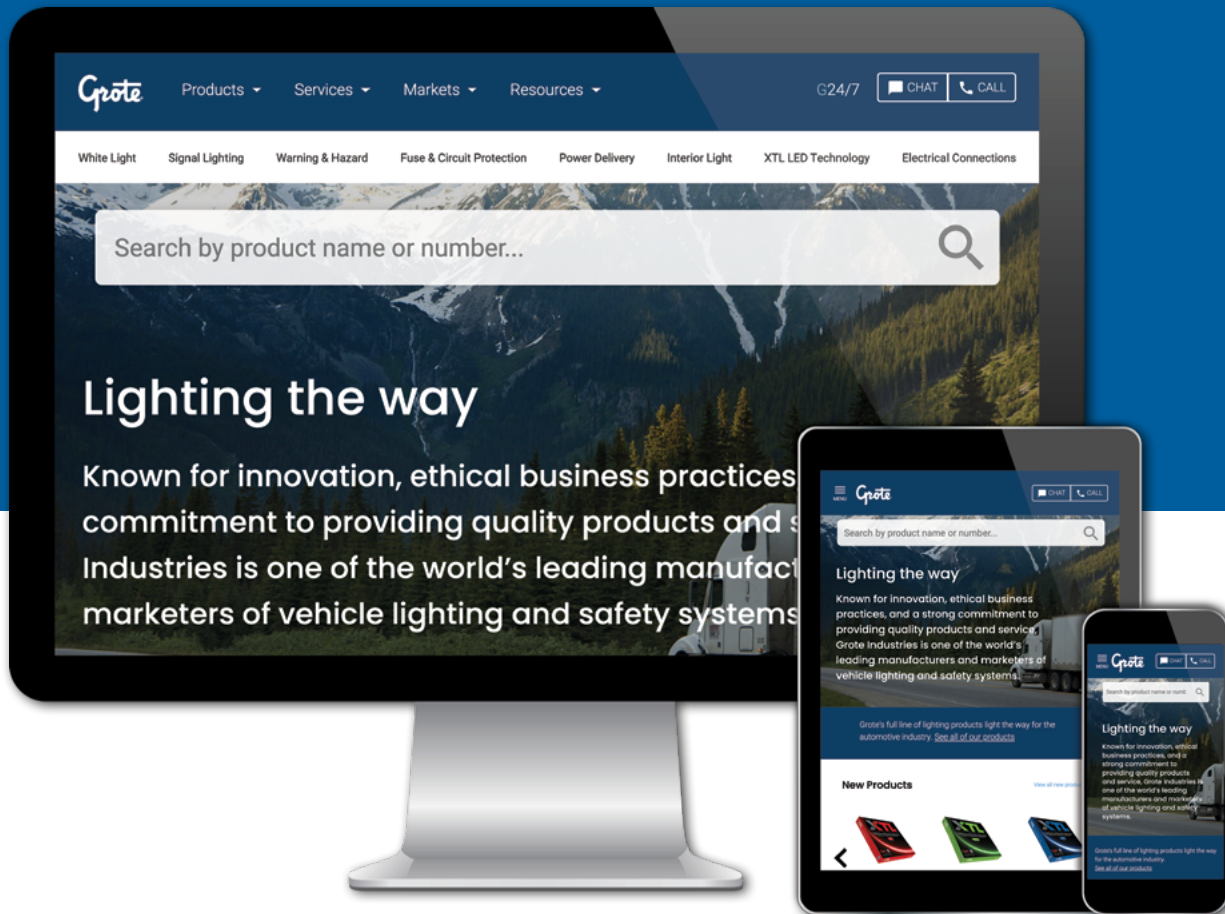
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IMPORTANT NOTE: Every lamp, reflex reflector, and conspicuity treatment must be permanently attached in the location specified below and must comply with all applicable requirements prescribed for it by FMVSS/CMVSS 108. The face of any device on the front/rear and sides should be, respectively perpendicular and parallel to the vehicle's centerline, unless it is photometrically certified at installation angle. No part of the vehicle shall prevent any device from meeting its prescribed requirements unless an auxiliary device meeting all prescribed requirements is installed.

IN CANADA: Manufacturers and importers of vehicles must have the proper certification test records demonstrating compliance of lighting components with all prescribed requirements.

BASIC EQUIPMENT REQUIRED ON ALL TRAILERS

DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	SAE Lens Coding	Functional Purpose	Quantity	Color	Location	Height mm(in.) from the ground
1	Tail Lamps	(T)	Indicate vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical as far apart as practicable	380-1830 (15-72)
	Stop Lamps	(S)	Indicate braking	Minimum 2	Red	On the rear - symmetrical as far apart as practicable	380-1830 (15-72)
	Rear Turn Signal Lamps	(I)	Indicate direction of turn	Minimum 2	Red or Amber	On the rear - symmetrical as far apart as practicable	380-2110 (15-83)
	Rear Reflex Reflectors	(A)	Indicate vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical as far apart as practicable facing rearward	380-1530 (15-60)
2	License Plate Lamp(s)	(L)	Illuminates license plate	Minimum 1	White	On the rear - above or at the sides of license plate	No requirement
3	Rear Side Marker Lamps	(P2, PC* or P3, PC2*) <small>*photometrically certified at installation angle</small>	Front and rear side marker lamps / side reflex reflectors indicate vehicle's presence and length	Minimum 2	Red	Each side at rear as far back as practicable	380-1530 (15-60) no max. for veh. under 2032mm (80") wide
	Rear Side Reflex Reflectors	(A)		Minimum 2	Red	Each side at rear as far back as practicable facing sideward	380-1530 (15-60)
4	a Front Side Marker Lamps	(P2, PC* or P3, PC2*) <small>*photometrically certified at installation angle</small>		Minimum 2	Amber	Each side at front as far forward as practicable	380 (15) minimum
	b Front Side Reflex Reflectors	(A)		Minimum 2	Amber	Each side at front as far forward as practicable facing sideward	380-1530 (15-60)

ADDITIONAL EQUIPMENT FOR TRAILERS EXCEEDING THE FOLLOWING PARAMETERS

Length 9.1m (30 ft.) or longer

DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	SAE Lens Coding	Functional Purpose	Quantity	Color	Location	Height mm(in.) from the ground
5	a Intermediate Side Marker Lamps	(P2, P3, PC* or PC2*) <small>*photometrically certified at installation angle</small>	Indicate presence of a long vehicle	Minimum 2	Amber	Each side near center facing sideward	380 (15) minimum
	b Intermediate Side Reflex Reflectors	(A)	Indicate presence of a long vehicle	Minimum 2	Amber	Each side near center facing sideward	380-1530 (15-60)

Width 2032mm (80 in.) or wider

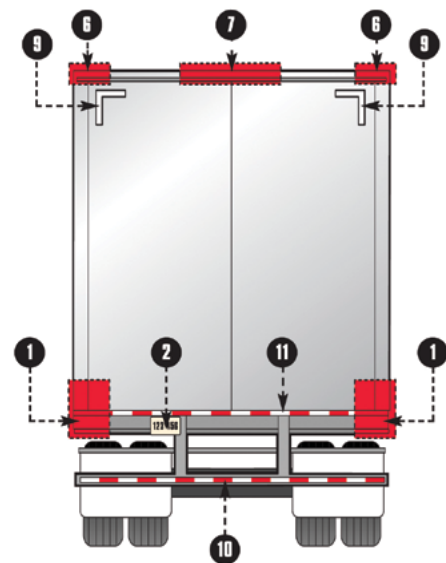
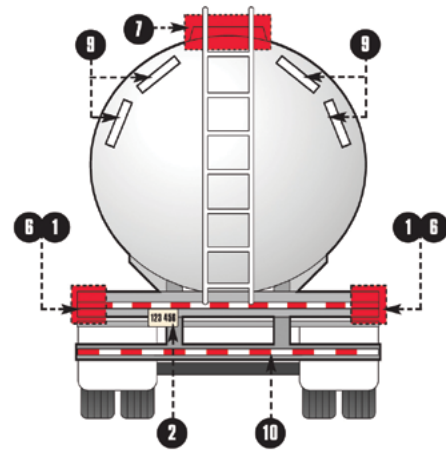
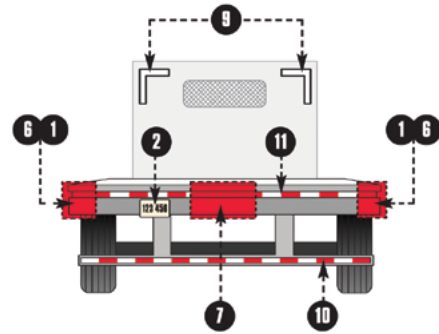
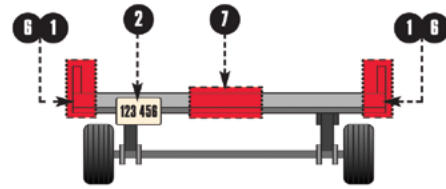
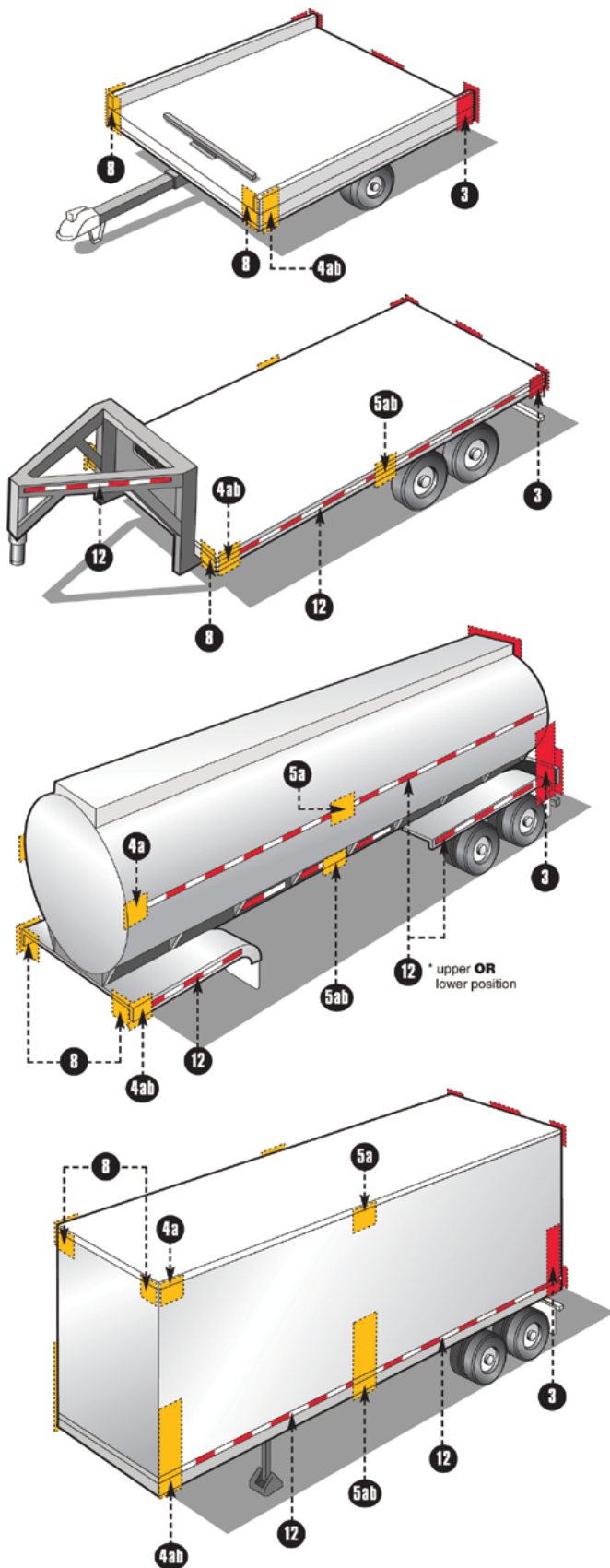
DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	SAE Lens Coding	Functional Purpose	Quantity	Color	Location	Height
6	Rear Clearance Lamps	(P2, PC* or P3, PC2*) <small>*photometrically certified at installation angle</small>	Show vehicle's width MAY NOT be combined with tail lamps	Minimum 2	Red	At widest point - symmetrical on the rear or near the rear facing rearward	As high as practicable may be lower only if ID lamps are at the top
7	Rear Identification (ID) Lamps	(P2 or P3)	Indicate presence of a wide vehicle	Exactly 3	Red	On the rear - center horizontally spaced 150mm (6 in.) to 300mm (12 in.) apart facing rearward	At the top - may be lower if door header narrower than 25mm
8	Front Clearance Lamps	(P2, PC* or P3, PC2*) <small>*photometrically certified at installation angle</small>	Show vehicle's width	Minimum 2	Amber	At widest point - symmetrical on the front or near the front facing forward	As high as practicable

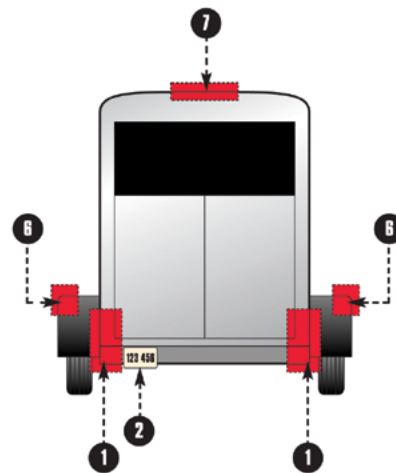
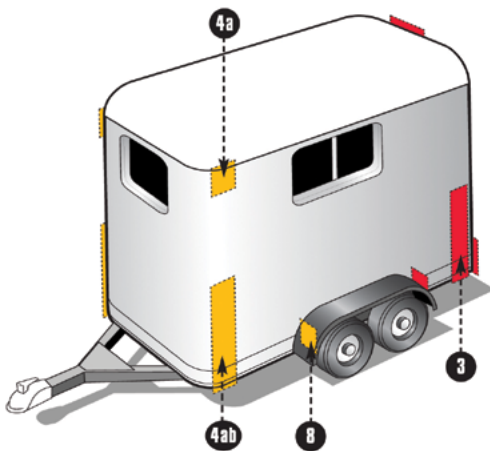
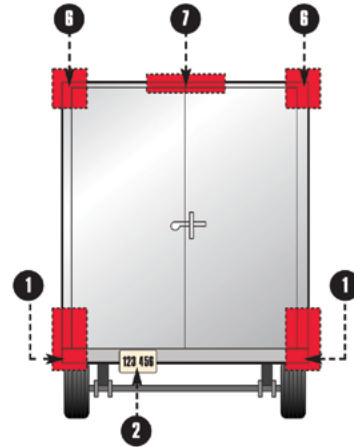
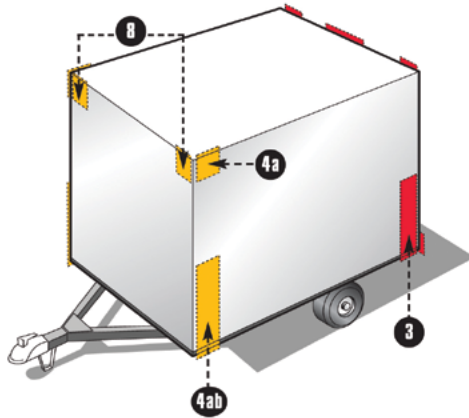
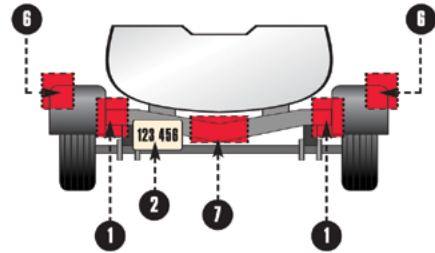
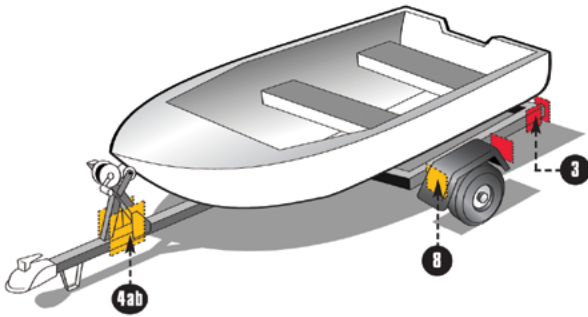
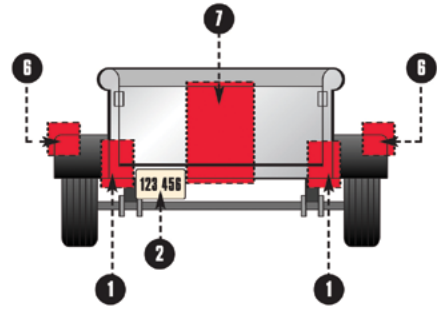
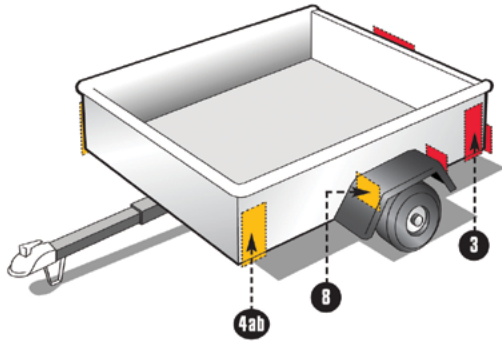
Width 2032mm (80 in.) or wider AND GVWR 4536 kg (10,000 lb.) or more

DESCRIPTION		MANDATORY REQUIREMENTS					
Area	Conspicuity Treatment	DOT Coding	Quantity	Color	Location	Height	Options
9	Rear Upper Body Markings	DOT-C DOT-C2 DOT-C3 DOT-C4	Exactly 2 pairs of 300mm long strips	White	On the rear upper corners facing rearward	At the top	Reflex reflectors may not be required if they are replaced in their required location with conspicuity treatment.
10	Bumper Bar Marking		Continuous	Red/White	On the rear bumper bar's horizontal element full width - facing rearward	No requirement	
11	Rear Lower Body Marking		Continuous	Red/White (see options)	On the rear full width of the vehicle facing rearward	As horizontal as practicable and as close as practicable to the range of 375 to 1525mm from the ground	
12	Side Marking		(see location)	Red/White (see options)	Each side - facing sideward continuous, or evenly spaced over minimum of 50% of length starts and ends as close to the front and rear of the vehicle as practicable	As horizontal as practicable and as close as practicable to the range of 375 to 1525mm from the ground	Optional in Canada: Rear lower body and side conspicuity treatment may also be solid white, solid yellow, or white and yellow.

NOTE: The edge of red conspicuity tape shall not be closer than 75 mm to the edge of any amber lamp and the edge of white conspicuity tape shall not be closer than 75 mm to the edge of any lamp

For more information contact: Transport Canada: Motor Vehicle Safety Enforcement Branch Attention: Compliance Engineering Fax: 613-998-4831
National Highway Traffic Safety Administration: Office of Safety Performance Standards Attention: Richard Van Iderstine Fax: 202-366-4329





IMPORTANT NOTE: Every lamp, reflex reflector, and conspicuity treatment must be permanently attached in the location specified below and must comply with all applicable requirements prescribed for it by FMVSS/CMVSS 108. The face of any device on the front/rear and sides should be, respectively perpendicular and parallel to the vehicle's centerline, unless it is photometrically certified at installation angle. No part of the vehicle shall prevent any device from meeting its prescribed requirements unless an auxiliary device meeting all prescribed requirements is installed.

IN CANADA: Manufacturers and importers of vehicles must have the proper certification test records demonstrating compliance of lighting components with all prescribed requirements.

BASIC EQUIPMENT REQUIRED ON ALL TRUCKS, BUSES & MPVs

DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	SAE Lens Coding	Functional Purpose	Quantity	Color	Location	Height mm(in.) from the ground
1	Headlamps - Lower Beam US requires "DOT" lettering on lens US&Canada - light source code required on lens	(H, HR)	Forward road illumination	Minimum 2	White	On the front - symmetrical as far apart as practicable If 4 lamp system - outboard or above upper beams	560-1370 (22-54)
	Headlamps - Upper Beam US requires "DOT" lettering on lens US&Canada - light source code required on lens	(H, HR)	Forward road illumination	Minimum 2	White	On the front - symmetrical If 4 lamp system - inboard or below lower beams	560-1370 (22-54)
	Parking Lamps Vehicles less than 2032mm wide	(P)	Indicate parked vehicle	Minimum 2	White or amber	On the front - symmetrical as far apart as practicable	380-1830 (15-72)
	Daytime Running Lamps (DRL) Canada - required / US - option US requires "DRL" lettering on lens if not headlamp	(Y2)	Indicate in use vehicle	Minimum 2	White or amber	On the front - symmetrical as far apart as practicable	380 (15) min. Max. depends on type of DRL
	Front Turn Signal/Hazard Warning Lamps	(I)	Indicate direction of turn/identify disabled vehicle	Minimum 2	Amber	On the front- symmetrical as far apart as practicable	380-2110 (15-83)
2	Front Clearance Lamps Vehicles 2032mm wide or wider *photometrically certified at installation angle	(P2, PC* or P3, PC2*)	Show vehicle's width	Minimum 2	Amber	At widest point - symmetrical on the front or near the front facing forward	As high as practicable
3	Front Identification Lamps (ID) Vehicles 2032mm wide or wider	(P2 or P3)	Indicate presence of a wide vehicle	Exactly 3	Amber	On the front - center horizontally spaced 150 mm (6 in.) to 300 mm (12 in.) apart	As high as practicable or on top of the cab
4	a Front Side Marker Lamps *photometrically certified at installation angle	(P2, PC* P3, PC2*)	Front and rear side marker lamps / side reflex reflectors indicate vehicle's presence and length	Minimum 2	Amber	Each side at front as far forward as practicable	380 (15) minimum
	b Front Side Reflex Reflectors	(A)		Minimum 2	Amber	Each side at front as far forward as practicable facing sideward	380-1530 (15-60)
5	a Rear Side Marker Lamps ** *photometrically certified at installation angle	(P2, PC* or P3, PC2*)	Rear side marker lamps / side reflex reflectors indicate vehicle's presence and length	Minimum 2	Red	Each side at rear as far back as practicable	380 (15) minimum
	b Rear Side Reflex Reflectors ** **not required on Truck Tractors	(A)		Minimum 2	Red	Each side at rear as far back as practicable facing sideward	380-1530 (15-60)
6	Rear Clearance Lamps Vehicles 2032mm wide or wider Not required on Truck Tractors *photometrically certified at installation angle	(P2, PC* or P3, PC2*)	Show vehicle's width MAY NOT be combined with tail lamps	Minimum 2	Red	At widest point - symmetrical on the rear or near the rear facing rearward	As high as practicable may be lower only if rear ID lamps are at the top
7	Rear Identification (ID) Lamps Vehicles 2032mm wide or wider Not required on Truck Tractors	(P2 or P3)	Indicate presence of a wide vehicle	Exactly 3	Red	On the rear - center horizontally spaced 150mm (6 in.) to 300mm (12 in.) apart facing rearward	At the top may be lower if door header narrower than 25mm
8	Tail Lamps	(T)	Indicate vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical as far apart as practicable	380-1830 (15-72)
	Stop Lamps	(S)	Indicate braking	Minimum 2	Red	On the rear - symmetrical as far apart as practicable	380-1830 (15-72)
	Rear Turn Signal/Hazard Warning Lamps	(I)	Indicate direction of turn/identify disabled vehicle	Minimum 2	Red or amber	On the rear - symmetrical as far apart as practicable	380-2110 (15-83)
	Rear Reflex Reflectors	(A)	Show vehicle's presence and width	Minimum 2	Red	On the rear - symmetrical as far apart as practicable	380-1530 (15-60)
9	Backup Lamp	(R)	Illuminates ground behind the vehicle and alert road users	Minimum 1	White	Rear	No requirement
10	License Plate Lamp(s)	(L)	Illuminates license plate	Minimum 1	White	On the rear - above or at the sides of license plate	No requirement
11	Center High Mounted Stop Lamp Vehicles less than 2032mm wide and 4536kg	(U3)	Indicates braking	1	Red	On the rear - centerline of the vehicle	860 (34) minimum

**ADDITIONAL EQUIPMENT FOR SPECIFIC VEHICLES
VEHICLES 9.1m (30 ft.) LONG OR LONGER**

DESCRIPTION				MANDATORY REQUIREMENTS			
Area	Equipment	SAE Lens Coding	Functional Purpose	Quantity	Color	Location	Height mm(in.) from the ground
12	a Intermediate Side Marker Lamps	(P2 or P3)	Indicate presence of a long vehicle	Minimum 2	Amber	Each side near center	380 (15) minimum
	b Intermediate Side Reflex Reflectors	(A)	Indicate presence of a long vehicle	Minimum 2	Amber	Each side near center facing sideward	380-1530 (15-60)

Truck Tractors

DESCRIPTION		MANDATORY REQUIREMENTS					
Area	Conspicuity Treatment	DOT Coding	Quantity	Color	Location	Height	Options
13	Rear Upper Body Markings	DOT-C DOT-C2	Exactly 2 pairs of 300mm long strips	White	Rear upper corners of cab facing rearward	As high as practicable excluding fairings	
14	Rear Marking	DOT-C3 DOT-C4	Exactly 2 sections of min. 600mm each	Red/White	Rear - facing rearward - on fenders, on mud flap brackets, or within 300mm below the top of mud flaps	As horizontal as practicable and not higher than 1525mm from the ground	If mud flaps not used - on the cab or frame mounted brackets

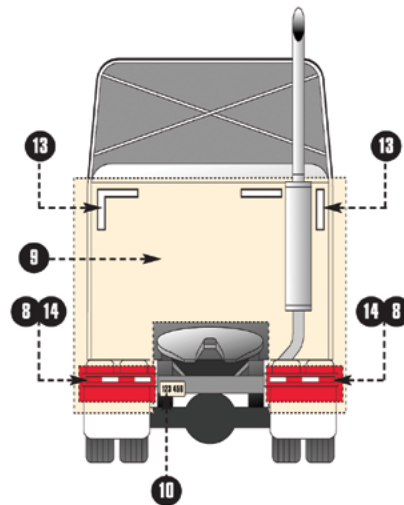
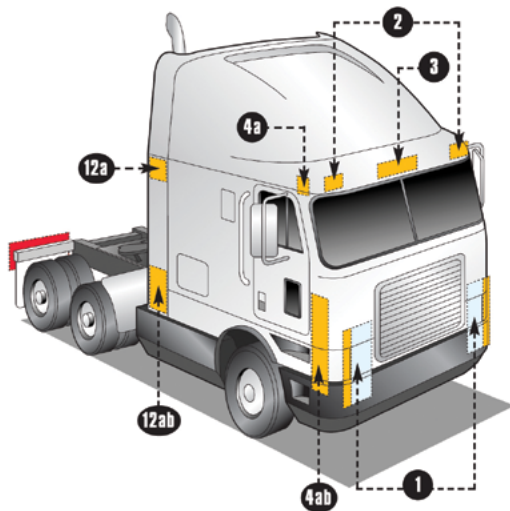
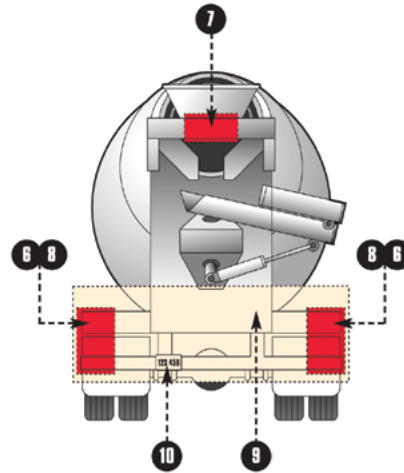
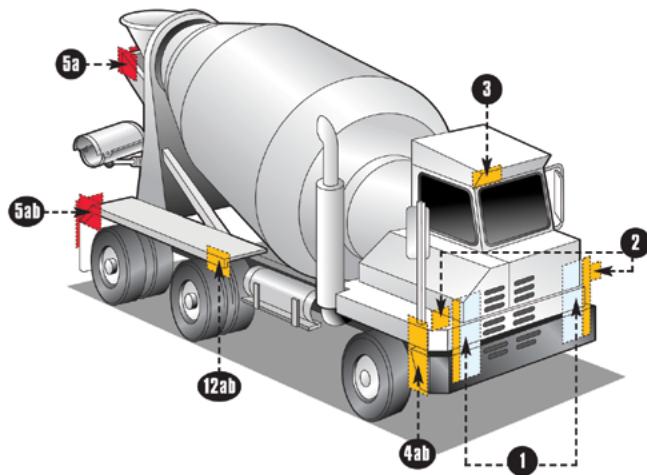
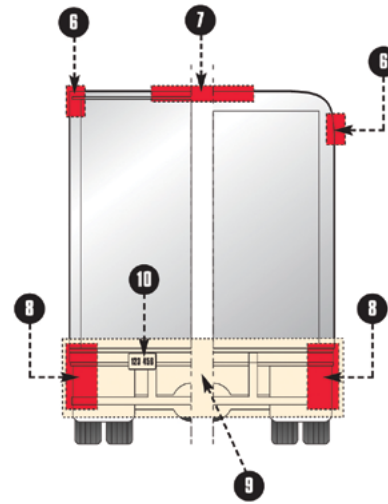
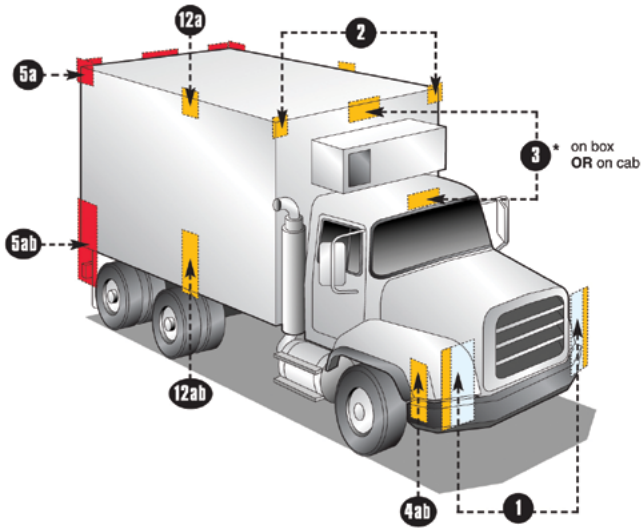
NOTE: The edge of red conspicuity tape shall not be closer than 75 mm to the edge of any amber lamp and the edge of white conspicuity tape shall not be closer than 75 mm to the edge of any lamp

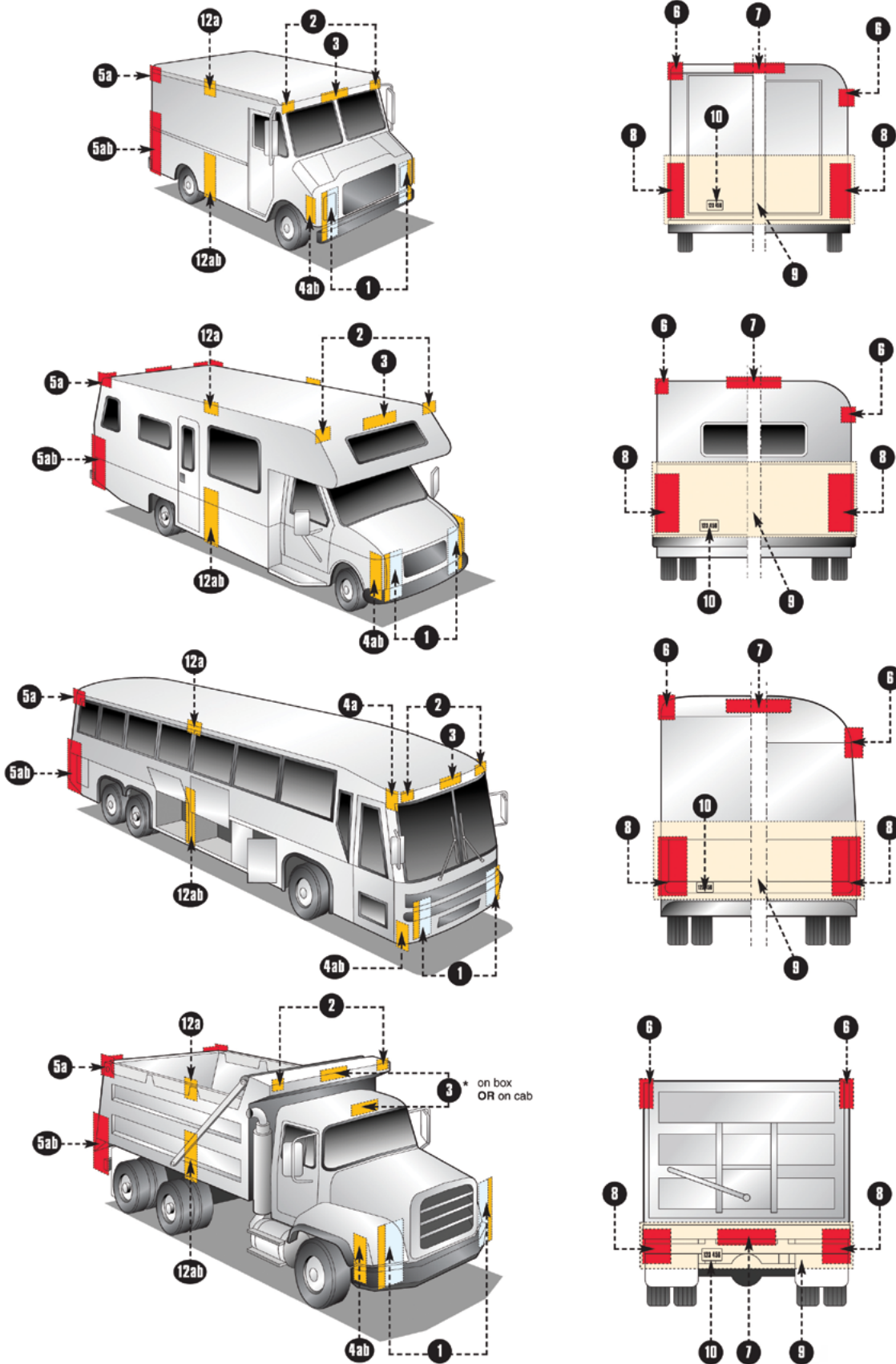
For more information contact:

National Highway Traffic Safety Administration: Office of Safety Performance Standards
Transport Canada: Motor Vehicle Safety Enforcement Branch

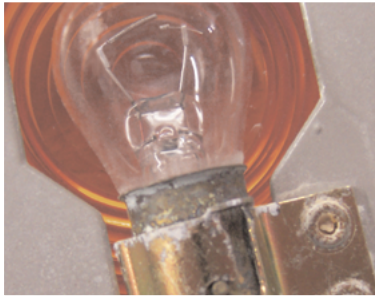
Attention: Richard Van Iderstine
Attention: Compliance Engineering

Fax: 202-366-4329
Fax: 613-998-4831





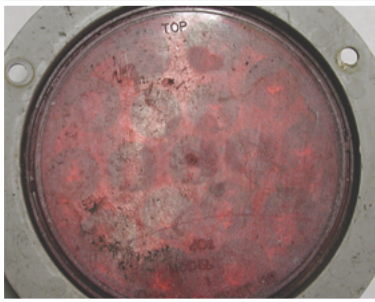
9 COMMON CAUSES OF FAILURE IN TRUCK WIRING AND LIGHTING



VIBRATION

Broken lamp filaments are one of the most common problems caused by vibration, but they also can lead to the abrasion of mating surfaces, which cause connectors and splices to fail.

To minimize vibration problems, make certain that all wires and connectors are secured appropriately. Always secure the wiring as it exits the connector. Use cushioned mountings for lamps in applications where vibration is excessive.

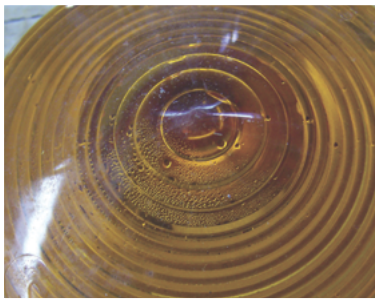


MOISTURE AND CORROSION

Condensed water droplets inside a lens or corrosion around a lamp socket are sure signs that moisture has penetrated the system.

Water can enter the system through ineffective wire seals, unprotected splices, unsealed crimps and connectors and non-mating seals.

When making repairs, don't replace a sealed system with unsealed components. Make certain that connector seals are in place and undamaged. Inspect them carefully for cuts, tears and punctures.



CHEMICAL DAMAGE

Continuous exposure to many of the common chemicals found in and around trucks can cause plastics to swell, crack, soften or otherwise become degraded. Diesel fuel and hot engine oil are the main culprits.

To minimize the effects of chemicals, inspect the wiring for signs of degradation. If it is occurring in an area that is generally free of contamination, check for leaky hoses, gaskets or fittings and repair if damaged or leaking.

To avoid damage from chemicals, don't run wiring in areas where the chance for continuous exposure is likely, such as under fuel lines and filters.

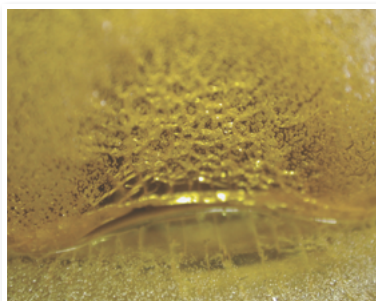
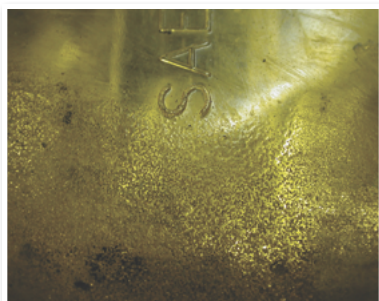


ABRASION

Abrasion occurs when wires or wire wraps are allowed to run against frame members or other abrasive surfaces. Once the insulation is worn away, bare conductors may contact a ground surface and create a grounded circuit. Or, it could cause wear to the point of fracture resulting in an open circuit.

Using the proper routing and coverings will help to prevent wear areas and abrasive damage.

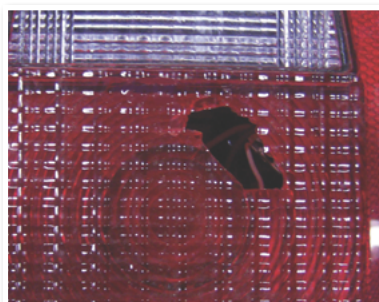
Worn coverings such as loom, convoluted tubing or spiral wrap should be replaced if they are no longer providing sufficient protection for the wires inside.



EXTREME TEMPERATURES

A variety of conditions lead to extreme temperature build-up that can damage lighting and wiring. These include leaving a trailer's tail lights on when the trailer is backed up to a dock and airflow around the lights is prohibited.

When lights have been damaged from heat buildup, the lenses are often bubbled and misshapen. Where extreme temperatures can't be avoided, special heat-resistant wires and materials should be used.



IMPACT

Lighting and wiring must be protected from the impact of rocks, gravel and other road debris. A major impact can cause enough damage to require extensive repairs. Smaller, more frequent impacts over time may deliver equally extensive damage. Such damage can cause problems although the wires are contained in a loom or other covering. During inspection, always check for damage from impacts and replace any wiring or lights that appear to be damaged. Make certain that the replacement parts are equivalent to or better than the original.



FLEXING

Wiring in a truck often must make sharp turns around corners, and can be subjected to constant flexing where doors or hoods are opened and closed repeatedly.

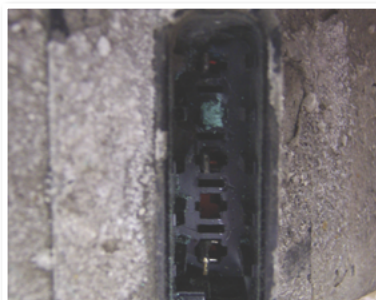
To prevent wire damage from repeated flexing, avoid tight radius turns. Make sure that the wire is not snagged or stressed at its maximum extension. Also, make certain that the wire moves smoothly through its flexing cycle and doesn't rub or scrape against adjacent components.



TENSILE LOADS

Wiring should not be considered an appropriate load-bearing component. It's easy to exceed the designed load limit by inadvertently installing wires under tension or snagging a section of wire on one of the moving parts. Using a wire bundle as a handhold or step can destroy the integrity of the conductor and its connections. So can the weight of accumulated ice, snow, mud and other materials.

Each of these points must be considered carefully when routing wires in a wiring harness.



GRIT AND SAND

Accumulation of abrasive materials can lead to damage, especially when combined with vibration. If gritty materials enter connections, they can accelerate the wear on contact points, causing interruption of the circuit and failure of devices. Sand and grit also can attract and hold moisture, creating conditions conducive to corrosion. In some cases, sand and grit may work their way inside protective coverings and abrade the insulation of wires running through them.

One of the ways of reducing sand and grit buildup is to eliminate abrasive materials in the areas where wiring is present. Another way is to seal openings on protective coverings to keep gritty materials from entering.

For more information, visit www.grote.com



A FAMILY'S MULTI-GENERATIONAL COMMITMENT TO THE VEHICLE AND TRANSPORTATION LIGHTING INDUSTRY.



William D. Grote, Founder, Grote® Industries, 1901

the lighting industry in a different context from those who simply find themselves working in the lighting business.

Grote® Industries is a family-owned business, just like many of the distributors, fleets, and OEMs we serve. Like a number of our customers, we're proud of our family's multi-generational commitment to the transportation industry that reaches back more than a century. We're thankful for the visionary legacy of our predecessors and because of it, we can't help but see the past, present and future of

Founded on the principles of solid customer relationships, continuous innovation and exceptional product performance, Grote® is committed to propelling itself and its industry, forward, with inventive products and challenging ideas.

As a corporation, our family's culture extends to our entire organization, around the globe and particularly to our customer-facing staff. Grote® is not sales oriented, we're not engineering oriented – we're relationship oriented and we're working hard every day to uphold our reputation and continue to earn your trust.

The Grote family has played a prominent role in shaping the vehicle lighting industry. We are deeply and personally engaged today, as we will be in the future, to make the kind of brave choices and bold decisions that will help move the vehicle lighting industry ahead and into an even brighter tomorrow.



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