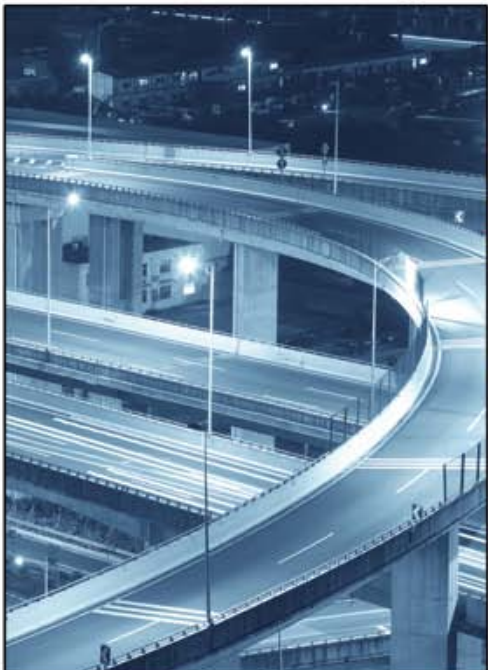




Innovative Vehicle Solutions  
[www.haldex.com](http://www.haldex.com)

# Air Wiper Motors Catalog

## L00140W - 6/14



## **Important Notice**

The products described within this literature, including without limitation, product features, specifications, designs, availability and pricing are subject to change by Haldex and its subsidiaries at any time without notice.

This document and other information from Haldex, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system, in the current literature or catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through their own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements are met.

---

## 06 – Air Wiper Motors

<b>Table of Contents</b>	06-1
<b>Part Number Index</b>	06-2
<b>General Information</b>	
Foreword	06-3
General Information	06-4
Piping Diagram	06-5
Application Guide	06-6
<b>Air Wiper Motors – Remanufactured</b>	
HP-100 Motor Series	06-8
HP-200 Motor Series	06-9
Super Challenger Motor Series	06-10
<b>Air Control Valves</b>	
Sprague Compatible	06-11
Trico Compatible	06-12
<b>Maintenance</b>	
Troubleshooting Guide	06-13
Maintenance	06-14

# 06-AIR WIPER MOTORS

# Part Number Index

Part Number	Type	Page #	Part Number	Type	Page #	Part Number	Type	Page #	Part Number	Type	Page #
RM1000001	S	06-11									
RM1105001	S	06-11									
RM1107001	S	06-11									
RM1112001	S	06-11									
RM1113001	S	06-11									
RM1115001	S	06-11									
RM1116001	S	06-11									
RM1117001	S	06-11									
RM1135001	S	06-11									
RM1137001	S	06-11									
RM1165001	S	06-11									
RM1225001	S	06-11									
RM1300201X	S	06-9									
RM1500001	S	06-11									
RM1506001	S	06-11									
RM1507001	S	06-11									
RM1576001X	S	06-10									
RM1650001	S	06-12									
RM1720161	S	06-12									
RM1720221	S	06-12									
RM1851002X	S	06-9									
RM1853601X	S	06-9									
RM1853602X	S	06-9									
RM2000001	S	06-11									
RM2070001X	S	06-8									
RM2160001X	S	06-8									
RM2281001X	S	06-8									
RM2447001X	S	06-8									
RM2500001X	S	06-8									
RM2540001X	S	06-8									
RM2598001X	S	06-9									
RM2631001X	S	06-8									
RM3165001X	S	06-9									
RM3250001X	S	06-9									
RM3495001X	S	06-8									
RM4000001	S	06-11									
RM7547001	S	06-12									
RM7547004	S	06-12									
RM7547005	S	06-12									

Type "O" = OEM P/N, Type "S" = Service P/N

If OEM part # is not found on page listed, refer to the MCR for applicable cross reference.

## PURPOSE OF THIS SECTION

This section is designed as a reference for Haldex new and remanufactured air brake system components and accessories, sold under the Haldex and Midland product names. Products described include all pertinent information needed to replace an OEM installed component or to help design an original installation. If there is a service number for a given part, it is noted in the product number table.

## DESIGN FLEXIBILITY

The products presented in this section are described by function and usage. Technical data and mounting configurations are also provided. Throughout this section, reference is made to numerous specific OEM applications. This section is not, however, intended to be a mutually exclusive listing of all part numbers and designs available. Should the need for a design not presented occur, contact your Haldex sales representative for additional information.

## WARRANTY INFORMATION

Proper service and repair are important to the safe, reliable operation of any motor vehicle. To prevent personal injury and/or vehicle damage, careful and cautious service procedures recommended by the vehicle manufacturer should be followed by anyone servicing a motor vehicle. For details on warranty of Haldex air brake system components and accessories, refer to L20221 Aftermarket Warranty Policy. For warranty returns, use L90005 Warranty Adjustment Form. To obtain further information, visit the [www.haldex.com](http://www.haldex.com) website, select **North America/English** in drop down box then search for **Warranty**.

## ORDERING PROCEDURE

Most customers can place electronic orders on the [www.haldex.com](http://www.haldex.com) website by obtaining a username and password or by using EDI. For additional information about electronic orders or to place an order by phone or fax, contact Customer Service in U.S. or Canada at numbers listed below:

### U.S. Customer Service:

Phone: 800-643-2374  
 Fax: 800-533-1941  
 Mail: Haldex Brake Products Corporation  
 Attn: Customer Service Department  
 10930 N. Pomona Ave.  
 Kansas City, MO 64153

### Canada Customer Service:

Phone: 800-267-9247  
 Fax: 519-621-3924  
 Mail: Haldex Limited  
 Canadian Distribution Centre  
 Attn: Customer Service Department  
 500 Pinebush Road, Unit 1  
 Cambridge, Ontario N1T 0A5

## IMPORTANT NOTICE

The data listed herein is correct to the best of Haldex's knowledge and belief, having been compiled from reliable and official sources of information. However, HALDEX CANNOT ASSUME ANY RESPONSIBILITY for possible error or misapplication of the product. Final determination of the suitability of the products for the use contemplated by the Buyer is the sole responsibility of the Buyer. Haldex shall have no responsibility in connection with this suitability. It is not our intention to imply that any of the components in this catalog in connection with an engine make or model are made by any engine manufacturer.

Copyright 2014  
 Haldex Brake Products Corporation  
 10930 N. Pomona Ave.  
 Kansas City, MO 64153

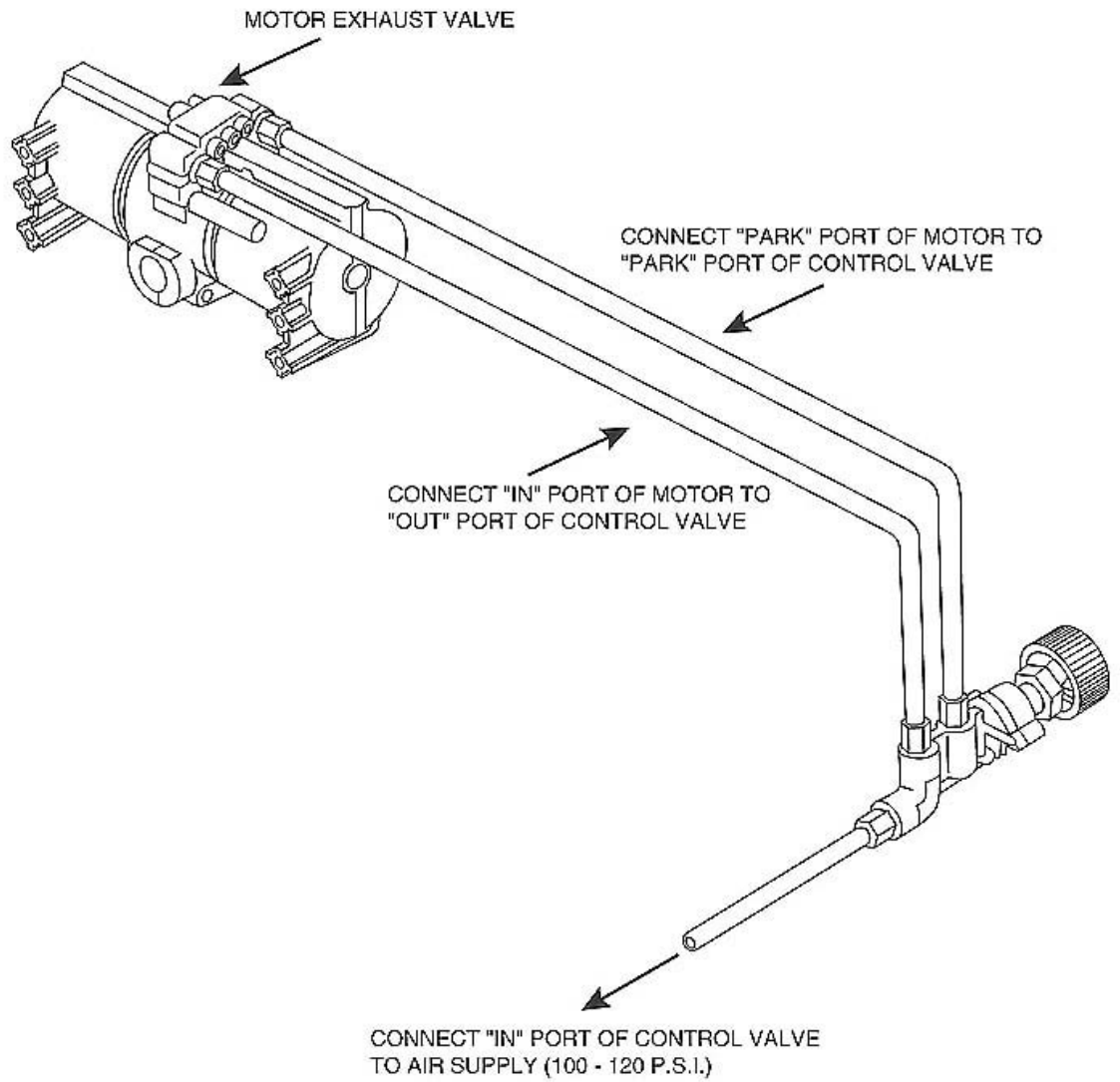
All rights reserved.  
 Materials may only be reproduced with written permission of Haldex.

**WARRANTY**

Remanufactured Heavy Duty Air Wiper Motors have a twelve (12) month, 3,600 hour (whichever comes first) warranty. For further details refer to L20221, Aftermarket Warranty Policy. For warranty returns, use L90005 Warranty Adjustment Form.

**SPECIAL NOTES**

1. Proper service and repair is important to the safe, reliable operation of all motor vehicles. To prevent personal injury and/or vehicle damage, careful and cautious service procedures recommended by the manufacturer should be followed by anyone servicing a motor vehicle. All information, illustrations, specifications and schematics contained in this section are based on the latest information available at the time of publication. Haldex reserves the right to make changes at any time without notice to the customer.
2. When replacing a TRICO Air Motor you must replace the Air Control Valve also.
3. Call the Haldex Technical Services line at 1-800-643-2374 to special order any air wiper motor or control valve not listed in this catalog.



# 06-AIR WIPER MOTORS

# Application Guide

VEHICLE MODEL & YEAR	MAKE & MODEL	TRICO/ OEM #'s	MIDLAND SPRAGUE/ OEM #'s	MIDLAND SERVICE NUMBER	CONTROL NUMBER
<b>AM LaFRANCE</b> -	-	20-11298 M-582-130	08-01866 AP1/1302	<b>RM1855003X</b>	-
<b>AUTOCAR</b> 1976-79 1976-79	LHD w/FPDP Motor LHD w/APMS Motor	FPDP-592 62801-3084 APMS-621-18 27108529	GS-3250 62801-3804 GS-3250 62801-3804	<b>RM3250001X</b> <b>RM3250001X</b>	<b>RM1137001</b> <b>RM1137001</b>
<b>CHEVROLET</b> ALL	Bison (D.S.)	APMS653-5	GS-2500	<b>RM2500001X</b>	<b>RM1115001</b>
<b>DIAMOND REO</b> ALL	Giant	APMS-621-16 27108529	GS-3250 62801-3804	<b>RM3250001X</b>	<b>RM1137001</b>
<b>FORD</b> ALL	L & LN Series Conventional	FSC-218-1	GS-2598	<b>RM2598001X</b>	<b>RM1500001</b>
<b>FREIGHTLINER</b> 1979-81 1979-81 1984-86 1984-86 1986-UP	Conventional (D.S.) Conventional (P.S.) C.O.E. (Left hand side) C.O.E. (Right hand side) Conventional	- - - - -	GS-1857-L SPRGS1857L GS-1857-R SPRGS1857R GS-2188 SPRGS2188 T7/36L GS-2289 SPRGS2289 GS-2182 SPRGS2182 T7/36R	<b>RM1857021X</b> <b>RM1857022X</b> <b>RM2188001X</b> <b>RM2189001X</b> <b>RM2281001X</b>	<b>RM1507001</b> <b>RM1117001</b> <b>RM1506001</b> <b>RM1115001</b> <b>RM1506001</b>
<b>GMC</b> ALL ALL ALL	General Conventional(D.S.) Brigadier (D.S.) Brigadier (P.S.)	2056272 FPDP543-6 G675563 FPDP543-4 G675565	V1092768 GS-2630 G15618603 GS-2631 G15618602	<b>RM2500001X</b> <b>RM2630002X</b> <b>RM2631001X</b>	<b>RM1115001</b> <b>RM1000001</b> <b>RM1000001</b>
<b>KENWORTH</b> 1969-81 1984-UP 1979-81 1982-90 1982-90	W-900 Conventional K-100 C.E.O. K-100 C.O.E. (D.S.) W-900-A, T-600-A, T800-A,(D.S.) W-900-A, T-600-A, T-800-A,(P.S.)	FPDP-525-6 K339-56-2 - - -	GS-2447 GS-2468 GS-1852-2 K-339-13-1 GS-1853-5-L K-339-13-10 GS-1853-5-R K-339-13-11	<b>RM2447001X</b> <b>RM2468001X</b> <b>RM1851002X</b> <b>RM1853601X</b> <b>RM1853602X</b>	<b>RM1135001</b> <b>RM1135001</b> <b>RM1117001</b> <b>RM1117001</b> <b>RM1117001</b>



# Application Guide

# 06-AIR WIPER MOTORS

VEHICLE MODEL & YEAR	MAKE & MODEL	TRICO/ OEM #'s	MIDLAND SPRAGUE/ OEM #'s	MIDLAND SERVICE NUMBER	CONTROL NUMBER
<b>MACK</b> 1973-79	R, U & DM Conventional Control Separate	APMP-614-12	1618380-C91 GS-3165 63QT411	RM3165001X	RM1165001
<b>NAVISTAR</b> 1982-85 1984-UP 1975-79 1986-UP 1980  1975-81 1981-85 1981-85 1986-93	Transtar 4270, 4370, 5000 Conventional 9370 C.O.E.  Transtar II 4070B C.O.E. Transtar II 4070B C.O.E. S Series Conventional  Transtar 42-4300 Conventional CO 9670 C.O.E.  CO 9670 C.O.E.  CO 9670 C.O.E.	APMP-670-3 546525C91 APMP-670-3 546525C91 5260905C91  -  APMS646-8 505487C93 APMS646-6 505488C91 -	GS-2160 1653467C91 GS-2160 1653467C91 1653909C91  M-551-105NAC91 540499-C91 M-551-105NAC92 540499C92 AS3/105092 GS-1576 468857C91 T11/71 1653467C91 T11/71 1653467C91 T11/71 1653467C91	RM2160001X  RM2160001X  RM5511052X  RM1576001X  RM1171001X  RM1171001X  RM1171001X	RM4000001  RM4000001  RM1128001  RM1225001  RM4000001  RM4000001  RM4000001
<b>PETERBILT</b> 1989-UP 1976-85 ALL	362 Conventional 359 Conventional (D.S.) Conventional (D.S.) & 352 C.O.E.	- FPDP-586-2 FPDP-441-2	GS-2065-1 GS-2070-1 GS-3105	RM2969001X RM2070001X RM3105001X	RM1517001 RM1135001 RM1135001
<b>VOLVO GM</b> 1985-UP 1987-UP	High C.O.E. Expeditor	- -	GS-3495 8065126 GS-3495 8065126	RM3495001X RM3495001X	RM1225001 RM1225001
<b>WESTERN STAR</b> 1979-UP	Conventional	APMS-621-4	GS-3250 62801-3804	RM3250001X	RM1137001
<b>WHITE</b> ALL 1970-73 1973-76 1973-78	Road Expeditor II C.O.E. Road Boss II Conventional Road Commander II C.O.E. 4000, 9000 Conventional  Road Boss Conventional  Road Boss Conventional	APMS636 62801-0004  FPDP-546 27108529 FPDP-546 27108529 FPDP-546 27108529	GS-3495 8065126  GS-3250 62801-3804 GS-3250 62801-3804 GS-3250 62801-3804	RM3495001X RM3495001X  RM3250001X  RM3250001X  RM3250001X	RM1225001 RM1225001  RM1137001  RM1137001  RM1137001

HP-100 Motor Series



Features:

- HP-100, HP-125, HP-130, HP-135 and HP-150

Notes:

- 1) When replacing a Trico Air Motor you must replace the Air Control Valve also.

SKU#	Product Description	Control Valve Number	Sprague Air Wiper Motor Number	Sprague Control Valve Number	Application/Notes	Approx. Weight	Core Group
RM2070001X	Remanufactured HP-100 Motor Series	RM1135001	GS-2070-1	K-113-5	76-85 Peterbilt	2.0 lbs.	AM1001
RM2160001X	Remanufactured HP-100 Motor Series	RM4000001	GS-2160	GK-4	-	2.6 lbs.	AM1001
RM2281001X	Remanufactured HP-100 Motor Series	RM1506001	GS-2281	K-150-6	Original Equipment	3.7 lbs.	AM1001
RM2447001X	Remanufactured HP-100 Motor Series	RM1135001	GS-2447	GK-14	69-81 Kenworth	2.4 lbs.	AM1001
RM2500001X	Remanufactured HP-100 Motor Series	RM1115001	GS-2500	K-111-5	Motor only - use existing bracket	1.6 lbs.	AM1001
RM2540001X	Remanufactured HP-100 Motor Series	RM1506001	GS-2540-1	K-150-6	Original Equipment	3.6 lbs.	AM1001
RM2631001X	Remanufactured HP-100 Motor Series	RM1000001	GS-2631	GK-1	-	3.2 lbs.	AM1001
RM3495001X	Remanufactured HP-100 Motor Series	RM1225001	GS-3495	K-122-5	-	2.2 lbs.	AM1001

## HP–200 Motor Series



### Features:

- HP-200 and HP-225
- Replacement for Air Push II Motor Series

### Notes:

- 1) When replacing a Trico Air Motor you must replace the Air Control Valve also.

SKU#	Product Description	Control Valve Number	Sprague Air Wiper Motor Number	Sprague Control Valve Number	Application/Notes	Approx. Weight	Core Group
RM1300201X	Remanufactured HP-200 Motor Series	RM1107001	A21-13002-1	K-110-7	Motor Only	3.0 lbs.	AM1001
RM1851002X	Remanufactured HP-200 Motor Series	RM1117001	GS-1851-2	K-111-7	1979-81 Kenworth	2.5 lbs.	AM1001
RM1853601X	Remanufactured HP-200 Motor Series	RM1117001	GS-1853-6-L	K-111-7	-	2.5 lbs.	AM1001
RM1853602X	Remanufactured HP-200 Motor Series	RM1117001	GS-1853-6-R	K-111-7	-	2.4 lbs.	AM1001
RM2598001X	Remanufactured HP-200 Motor Series	RM1500001	GS-2598	GK-15	-	4.0 lbs.	AM1001
RM3165001X	Remanufactured HP-200 Motor Series	RM1165001	GS-3165	K-116-5	Single Motor System	4.3 lbs.	AM1001
RM3250001X	Remanufactured HP-200 Motor Series	RM1137001	GS-3250	K-113-7	Single Motor System	5.1 lbs.	AM1001

Super Challenger Motor Series



Features:

- M-555-DEG and MD-713-DEG

Notes:

- 1) When replacing a Trico Air Motor you must replace the Air Control Valve also.

SKU#	Product Description	Control Valve Number	Sprague Air Wiper Motor Number	Sprague Control Valve Number	Approx. Weight	Core Group
RM1576001X	Remanufactured Super Challenger Motor Series Air Wiper Motor	RM1225001	GS-1576	K-122-5	2.8 lbs.	AM1001

## Sprague Compatible



SKU#	Product Description	Sprague #
RM1000001	End Port Air Control Valve for Air Wiper Motor	GK-1
RM1105001	Side Port Air Control Valve for Air Wiper Motor	K-110-5
RM1107001	Side Port Air Control Valve for Air Wiper Motor	K-110-7
RM1112001	End Port Air Control Valve for Air Wiper Motor	K-111-2
RM1113001	End Port Air Control Valve for Air Wiper Motor	K-111-3
RM1115001	End Port Air Control Valve for Air Wiper Motor	K-111-5
RM1116001	End Port Air Control Valve for Air Wiper Motor	K-111-6
RM1117001	End Port Air Control Valve for Air Wiper Motor	K-111-7
RM1135001	End Port Air Control Valve for Air Wiper Motor	K-113-5
RM1137001	End Port Air Control Valve for Air Wiper Motor	K-113-7
RM1165001	Side Port Air Control Valve for Air Wiper Motor	K-116-5
RM1225001	Side Port Air Control Valve for Air Wiper Motor	K-122-5
RM1500001	End Port Air Control Valve for Air Wiper Motor	GK-15
RM1506001	Wipe/Wash Air Control Valve for Air Wiper Motor	K-150-6
RM1507001	Wipe/Wash Air Control Valve for Air Wiper Motor - without Knob	K-150-7-B
RM2000001	Wash Air Control Valve for Air Wiper Motor	K-2
RM4000001	Side Port Wash/Wipe Air Control Valve for Air Wiper Motor	GK-4

Trico Compatible



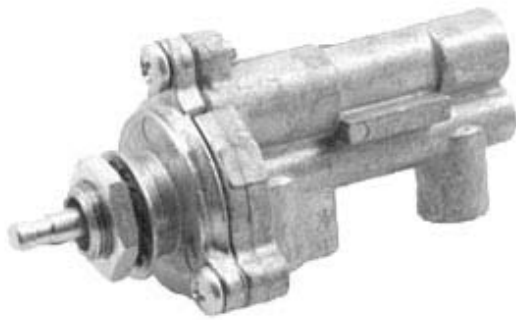
RM1650001



RM1720161



RM1720221



RM7547001



RM7547004

SKU#	Product Description	Trico #
RM1650001	End Port Air Control Valve – Trico Compatible for Air Wiper Motor	F-1650-6NS
RM1720161	End Port Air Control Valve – Trico Compatible for Air Wiper Motor	F-1720-16NS
RM1720221	End Port Air Control Valve – Trico Compatible for Air Wiper Motor	F-1720-22NS
RM7547001	Side Port Air Control Valve – Trico Compatible for Air Wiper Motor	75470-138
RM7547004	Side Port Air Control Valve – Trico Compatible for Air Wiper Motor	75470-70
RM7547005	Side Port Air Control Valve – Trico Compatible for Air Wiper Motor	75470-82

## WINDSHIELD WIPER SYSTEM

PROBLEM	PROBABLE CAUSE	SOLUTION
Motor fails to start.	<ol style="list-style-type: none"> <li>1. Compressor malfunction.</li> <li>2. Air line leak or break.</li> <li>3. Control valve contaminated.</li> <li>4. Motor valve malfunction.</li> <li>5. Linkage binding or worn.</li> </ol>	<ol style="list-style-type: none"> <li>1. Repair compressor.</li> <li>2. Secure or replace.</li> <li>3. Clean and lubricate valve.</li> <li>4. Replace motor.</li> <li>5. Free up or replace.</li> </ol>
Air to motor, but shaft immobile.	<ol style="list-style-type: none"> <li>1. Broken driver loose or cracked.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace.</li> </ol>
Motor and shaft operable, but arm stationary.	<ol style="list-style-type: none"> <li>1. Arm driver loose or cracked.</li> </ol>	<ol style="list-style-type: none"> <li>1. Secure or replace.</li> </ol>
Slow motor operation.	<ol style="list-style-type: none"> <li>1. Air line leak or break.</li> <li>2. Control valve contaminated.</li> <li>3. Internal pressure loss.</li> <li>4. Motor valve malfunction.</li> </ol>	<ol style="list-style-type: none"> <li>1. Secure or replace.</li> <li>2. Clean and lubricate valve.</li> <li>3. Replace motor.</li> <li>4. Replace motor.</li> </ol>
Erratic motor operation.	<ol style="list-style-type: none"> <li>1. Valve pin off center or short.</li> <li>2. Tee binding on reverser rod.</li> <li>3. Main "O"Rings worn or dry.</li> <li>4. Cylinder wall contaminated or scoured.</li> <li>5. Exhaust ports clogged.</li> <li>6. Unused parking end plate closed.</li> <li>7. Motor valve malfunction.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace motor.</li> <li>2. Replace motor.</li> <li>3. Replace motor.</li> <li>4. Replace motor.</li> <li>5. Clean.</li> <li>6. Remove restriction.</li> <li>7. Replace motor.</li> </ol>
Slam action operation.	<ol style="list-style-type: none"> <li>1. Internal pressure loss.</li> <li>2. Air port clogged.</li> <li>3. Motor valve malfunction.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace motor.</li> <li>2. Replace motor.</li> <li>3. Replace motor.</li> </ol>
Short sweep operation.	<ol style="list-style-type: none"> <li>1. Valve pin off center.</li> <li>2. Motor valve malfunction.</li> <li>3. Internal pressure loss.</li> <li>4. Tight main bearings.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace motor.</li> <li>2. Replace motor.</li> <li>3. Replace motor.</li> <li>4. Replace motor.</li> </ol>
Over sweep operation.	<ol style="list-style-type: none"> <li>1. Worn gear and rack.</li> <li>2. Worn or broken piston stops.</li> <li>3. Loose main bearings.</li> <li>4. Worn arm pivot.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace motor.</li> <li>2. Replace motor.</li> <li>3. Replace motor.</li> <li>4. Replace motor.</li> </ol>

**AIR FILTER**

It is desirable to have a small air filter for the wiper system. The filter should be the "absorption" type for use with hydrocarbon gases, vapors and varnish solids. The filter should be placed in air line leading to control valves.

**IN LINE OILER**

These units will act as an air filter as well as keeping a supply of oil going to the wiper system. Unit should have a drain and oil change at least twice a year.

**ALCOHOL INJECTOR**

These units are very useful for vehicles operating in severe cold conditions. Precautions should be taken to keep sufficient lubricant in the motor as alcohol will tend to wash it away. If used heavily, it may be necessary to remove the motor valve and manually regrease unit.

**PREVENTATIVE MAINTENANCE – Windshield Wiper Motors**

These instructions are included to help you increase the service life of a new or rebuilt wiper motor unit. Applicable motors are the Power Plus Challenger, Power Plus Super Challenger and Air Push II. HP-100 Series & HP-200 Series.

One of the best preventative actions one can take is not to let the wiper system sit too long without operation. An active truck wiper system should run every other day, if only for a few cycles. This action will keep the lubricant and "O"rings moveable and less likely to take a set. This is very important on older vehicles or systems which pass along a large amount of air line contamination. Contaminants tend to thin lubricant so as to wash it from the motor valve. It can be strong enough to attach "O"rings, causing swelling and deterioration. The most common failure is that fluid enters the motor, washes away lubricant and dries on the "O"rings causing them to stick. This is why an active motor is less likely to fail. Several additional steps can be taken to prevent this failure and prolong the life of the motor.

**PREVENTATIVE MAINTENANCE – Additional Lubricants Added To the Motor**

Additional lubricants can be used as a preventative maintenance or as a field fix for sticky units. If "O"rings are not damaged and the motor is not frozen, lubricant injected into the air lines will keep a motor running. We recommend that one half ounce be injected into each motor at a location as close to the motor valve as possible. Allow motor to run fifteen minutes (remove arm or place a rag under blade) to work the lubricant through the valve.

On an average system, lubricating in this manner every six months is sufficient. Where heavy contamination is present, more frequent applications may be required. This is not a substitute for proper maintenance but can give relief for most contaminated systems.

A light viscosity, wax-free oil is recommended. Do not use any type of penetrating fluid or oil. While these will free a motor, they may do more harm than good. They will break down lubricants in the motor and attack "O"rings. Most are not intended for pneumatic use. Only under emergency situations should these be used and should be followed by the addition of lubricating oil and possibly a breakdown and manual regreasing of the motor.



This page left blank intentionally.

Haldex develops and provides reliable and innovative solutions with focus on brake and air suspension products to the global commercial vehicle industry.

Listed on the Stockholm Stock Exchange, Haldex has annual sales of approximately 3.9 billion SEK and employs about 2,200 people.

Disclaimer: The products described within this literature, including without limitation, product features, specifications, designs, availability and pricing are subject to change by Haldex and its subsidiaries at any time without notice.

This document and other information from Haldex, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system, in the current literature or catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through their own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements are met.

©2014, Haldex AB - This material may contain Haldex trademarks and third party trademarks, trade names, corporate logos, graphics and emblems which are the property of their respective companies. The contents of this document may not be copied, distributed, adapted or displayed for commercial purposes or otherwise without prior written consent from Haldex.

Innovative Vehicle Solutions

#### Austria

Haldex Wien Ges.m.b.H.  
Vienna  
Tel.: +43 1 8 69 27 97  
Fax: +43 1 8 69 27 97 27  
E-Mail: info.at@haldex.com

#### Belgium

Haldex N.V.  
Balegem  
Tel.: +32 9 363 90 00  
Fax: +32 9 363 90 09  
E-Mail: info.be@haldex.com

#### Brazil

Haldex do Brasil Ind. E Com. Ltda.  
São José dos Campos  
Tel.: +55 12 3935 4000  
Fax: +55 12 3935 4018  
E-Mail: info.brasil@haldex.com

#### Canada

Haldex Ltd.  
Cambridge, Ontario  
Tel.: +1 519 621 6722  
Fax: +1 519 621 3924  
E-Mail: info.ca@haldex.com

#### China

Haldex Vehicle Products Co. Ltd.  
Suzhou  
Tel.: +86 512 8885 5301  
Fax: +86 512 8765 6066  
E-Mail: info.cn@haldex.com

#### France

Haldex Europe SAS  
Weyersheim  
Tel.: +33 3 88 68 22 00  
Fax: +33 3 88 68 22 09  
E-Mail: info.eur@haldex.com

#### Germany

Haldex Brake Products GmbH  
Heidelberg  
Tel.: +49 6 221 7030  
Fax: +49 6 221 703400  
E-Mail: info.de@haldex.com

#### Hungary

Haldex Hungary Kft.  
Szentlőrincskáta  
Tel.: +36 29 631 400  
Fax: +36 29 631 401  
E-Mail: info.hu.eu@haldex.com

#### India

Haldex India Limited  
Nasik  
Tel.: +91 253 6699501  
Fax: +91 253 2380729

#### Italy

Haldex Italia Srl.  
Biassono  
Tel.: +39 039 47 17 02  
Fax: +39 039 27 54 309  
E-Mail: info.it@haldex.com

#### Korea

Haldex Korea Ltd.  
Seoul  
Tel.: +82 2 2636 7545  
Fax: +82 2 2636 7548  
E-Mail: info.hkr@haldex.com

#### Mexico

Haldex de Mexico S.A. De C.V.  
Monterrey  
Tel.: +52 81 8156 9500  
Fax: +52 81 8313 7090

#### Poland

Haldex Sp. z o.o.  
Praszka  
Tel.: +48 34 350 11 00  
Fax: +48 34 350 11 11  
E-Mail: info.pl@haldex.com

#### Russia

OOO "Haldex RUS"  
Moscow  
Tel.: +7 495 747 59 56  
Fax: +7 495 786 39 70  
E-Mail: info.ru@haldex.com

#### Spain

Haldex España S.A.  
Granollers  
Tel.: +34 93 84 07 239  
Fax: +34 93 84 91 218  
E-Mail: info.es@haldex.com

#### Sweden

Haldex Brake Products AB  
Landskrona  
Tel.: +46 418 47 60 00  
Fax: +46 418 47 60 01  
E-Mail: info.se@haldex.com

#### United Kingdom

Haldex Ltd.  
Newton Aycliffe  
Tel.: +44 1325 310 110  
Fax: +44 1325 311 834  
E-Mail: info.gb@haldex.com

Haldex Brake Products Ltd.  
MIRA Technology Park  
Tel.: +44 2476 400 300  
Fax: +44 2476 400 301  
E-Mail: info.gbre@haldex.com

#### USA

Haldex Brake Products Corp.  
Kansas City  
Tel.: +1 816 891 2470  
Fax: +1 816 891 9447  
E-Mail: info.us@haldex.com



www.haldex.com

L00140W US 6/14 WEB ONLY