

Eaton Limited Warranty

Aeroquip®
Arrow®
Airflex®
Boston®
Char-Lynn®
DOWMAX®

Eaton®
Everflex®
Gromelle™
Hydrokraft®
Hansen™
Hydre-MAC™

Hydro-Line®
Integrated Hydraulics™
SEL®
Synflex®
Vickers®

Weatherhead®
Walterscheid™
Winner™



Powering Business Worldwide

General Information

Eaton Hydraulics LLC, Eaton Aeroquip LLC, Eaton Industries LP, and Eaton Corporation* (hereinafter referred to as "Eaton") warrant to the original purchaser that products sold shall be free from defects in material and workmanship for the warranty period applicable to the purchased product as specified in Appendix A.

If buyer claims that a product violates this Limited Warranty, Eaton, upon notice promptly given, will either examine the product at buyer's site, or issue shipping instructions for return to Eaton at buyer's expense, transportation charges prepaid unless otherwise instructed.

Eaton's sole obligation under this Limited Warranty shall be, at its option, to repair, replace or refund the price of any product or part thereof which is proved to violate this Limited Warranty.

This warranty does not cover reimbursement for labor, gaining access, removal, installation, temporary power or equipment, or any other expenses, which may be incurred in connection with repair or replacement.

Eaton's obligation under this Limited Warranty is conditioned upon receipt of all payments due from buyer and prompt written notice of buyer's warranty claim.

In no event, whether based on contract, indemnity, warranty, tort (including negligence), strict liability, or otherwise, shall Eaton be liable to the buyer for special, indirect, incidental or consequential damages whatsoever including, without limitation, loss of profit or revenue. THIS LIMITED WARRANTY IS THE BUYER'S EXCLUSIVE REMEDY AND EATON HEREBY EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

The foregoing shall constitute the sole remedy of the buyer and the sole liability of Eaton.

This Limited Warranty shall not apply to any product or component thereof which has been repaired or altered by anyone other than Eaton authorized personnel in any manner so as, in Eaton's sole judgment, to affect its serviceability, or to any product that has been subject to alteration, accident, misuse, abuse, neglect, or normal wear.

This Limited Warranty shall not apply to products which have been assembled or installed or used in a manner contrary to Eaton's printed instructions, or due to failure to follow Eaton's printed instructions for operation and maintenance.

This Limited Warranty shall not apply to product samples or prototypes. Samples and prototypes are provided "AS - IS," and Eaton has no liability or responsibility for any defects, errors, or omissions in, or any uses or decisions made by the buyer with or in reliance upon, samples or prototypes. NO WARRANTIES OF ANY KIND (EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE) ARE MADE IN CONNECTION WITH SAMPLES OR PROTOTYPES.

Any technical assistance provided by Eaton's personnel or representatives in system design is construed to be a proposal and not a recommendation. The responsibility for determining feasibility rests with the user and should be subject to test.

Only the terms expressed in this Limited Warranty shall apply and no distributor, corporation or individual is authorized to amend, modify or extend this Limited Warranty in any way on resale.

For product return authorization:

Eaton Aeroquip LLC
Eaton Hydraulics LLC
Eaton Corporation*
1-888-258-0222

(In Europe)

Eaton Industries LP
+44 (0)2392 487669

For additional information contact:

Eaton Aeroquip LLC
Eaton Hydraulics LLC
Eaton Corporation*
1-888-258-0222
Warranty Department
14615 Lone Oak Rd
Eden Prairie, MN 55344
Web site: www.eaton.com/hydraulics/warranty

* Eaton Corporation refers to Eaton's Airflex and Synflex branded products.

Appendix A - Level 5

The following products carry a five (5) year Limited Warranty from the warranty start date, which is the date of manufacture OR the ship date to the original customer (whichever occurs first), unless otherwise stated.

Brand	Product	Series	Description
Eaton	Wired Electronics	FF91117	Wired Electronics
	Wireless Electronics	FF92117	Wireless Electronics
	Hose	FC839B	One Wire Hose - Premium Abrasion
		EC525	Spiral 100R12 Hose - Premium High Temperature
		EC502	LifeSense® SAE 100R2AT
		EC850	Specialty Very High Pressure Spiral Hose
		EC810	Spiral 100R15 Hose - Premium Low Temperature
		EH857† SC-GTW	API 1529 Fuel Hose† LPG Hose
Char-Lynn	Hydraulic Motor	Various	Hydraulic Motors products except for electric or electronic components which carry a one (1) year Limited Warranty (See Level 1 of this Appendix)
Aeroquip*	Hose With Qualified Hose Ends	2807, 2808	Hose with Teflon® Smooth Bore
		FC234	AQP – SAE100R5 - USCG/MMT, NMMA/BIA
		FC300	AQP – SAE100R5 Truck
		FC332	AQP – Socketless - General Purpose
		FC350, FC355	AQP – Truck - FMVSS 106
		FC363, FC364	Convoluted Hose with Teflon®
		FC465, FC469, FC493	Conductive Hose with Teflon® Smooth Bore
		FC498 FC598	AQP – SAE100R6
		FC510	AQP – Hi-Pac - SAE100R16
		FC563	Non-Conductive Convoluted Hose with Teflon®
		FC650	AQP – Truck - Hi-Temperature Fuel & Oil
		FC699	AQP – Truck - Hi-Temperature Fuel
		FC735	Two Wire Hose - Premium Abrasion
		FC736	Spiral 100R12 Hose - Premium Abrasion
		FC273B	Spiral 100R13 Hose - Premium Abrasion
		GH120	Two Wire Hose - Premium Low Temperature
		GH194	One Wire Hose - Premium High Temperature
		GH195	Two Wire Hose - Premium High Temperature
Weatherhead*	Hose With Qualified Hose Ends	H145R	One Wire Hose - Premium Abrasion
		H190H	One Wire Hose - Premium High Temperature
		H243	Hose with Teflon®
		H245L	Two Wire Hose - Premium Low Temperature
		H277	Conductive Hose with Teflon®
		H280R	Two Wire Hose - Premium Abrasion
		H290H	Two Wire Hose - Premium High Temperature
		H332	CPE– General Low Purpose
		H430R	Spiral 100R12 Hose - Premium Abrasion
		H471R	Spiral 100R13 Hose - Premium Abrasion
		H569	CPE – SAE100R5 Truck
		H485	Multi Spiral – SAE100R15
Everflex*	Hose with Teflon®		S, B STW, SCTW 8000, 8500, Hi-pressure
Eaton	Carbon Steel and Stainless Steel Adapters		STC®
			SAE Flanges Code 61 & 62
			ORS
			SAE 45* & 37* (JIC)
			SAE ORB
			DKOL, DKOS
			BSPP
			JIS
			ISO 6149
			NPTF/NPSM
			BSPT Tube-O
Eaton	Quick Disconnect Couplings	FD14	Oil Pan Drain
		FD15	Oil Sampling Valve
		FD86	Thread to Connect Dry Break-High Impulse
		FD90	Diagnostic

† To coincide with API (American Petroleum Institute) regulations, EH857 hose is warranted for seven (7) years from the date of manufacture.

Teflon® is a registered trademark of DuPont used under license by Eaton.

Appendix A - Level 3

The following products carry a three (3) year Limited Warranty from the warranty start date, which is the date of manufacture OR the ship date to the original customer (whichever occurs first), unless otherwise stated.

Brand	Product	Series	Description
Eaton Vickers DOWMAX(TM) Hydre-MAC(R) Hydro-Line** Hydrokraft Integrated Hydraulics	Various	Various	All products except for electric or electronic components and certain cylinders (See Level 1 of this Appendix), and for remanufactured pumps which carry a two (2) year Limited Warranty from completion date of remanufacture**
Eaton	DuraForce	HMV/HMR HMF/HMA HPV/HPR	Hydraulic Motor Hydraulic Pump
Eaton	Jeil	JMV JMF HRC CMU	Track Drive Motor Swing Drive Motor Remote Controls Control Valve
Eaton	Power Units	Various	Three (3) year Limited Warranty period with the exception of electric or electronic components which carry a one (1) year Limited Warranty (See Level 1 of this Appendix)
Aeroquip*	Hose With Qualified Hose Ends	27J81 2661 CR170 FC254 FC325 FC500 FC555 FC579 FC606 FC611, FC613 FC619 FC636 FC802 FC849, FC849B GH134 GH275 GH466 GH493 GH506 GH663 GH781	DIN 2 -wire braided construction Specialty Suction Hose LPG – CGA Type III Specialty Spiral 4SH Hose Spiral Hose Spiral 100R13 Hose - Premium A/C & Refrigeration Specialty Two Wire Hose Spiral 100R15 Hose - Premium Specialty One Wire Hose Specialty Suction Hose Specialty Spiral 100R12 Hose A/C & Refrigeration – 100R5 Fittings Specialty Two Wire Hose A/C & Refrigeration – SAEJ2064 Type Class 1 Spiral 4SP Hose Specialty Spiral 100R15 Hose Spiral 100R12 Hose - Premium Specialty 4SH Hose One Wire Hose - Premium Two Wire Hose - Premium
Weatherhead*	Hose With Qualified Hose Ends	GH134W H039 H190 H213 H239 H241 H280 H421 H429 H430 H464 H471 H545	A/C & Refrigeration – SAEJ2064 Type Class 1 Specialty Suction Hose One Wire Hose - Premium CPE – Truck -SAEJ1402 Type AI DOT AI CPE – Truck -SAEJ1402 Type AII DOT AII CPE/Hi-Pac Hose Two Wire Hose - Premium Specialty Two Wire Hose CPE – Truck - SAEJ1019 Spiral 100R12 Hose - Premium Specialty 4SH Hose Spiral 100R13 Hose - Premium Specialty One Wire Hose
Eaton*	Hose With Qualified Hose Ends	EC502 EC810 EC910 EC600 FC800 All GH001 GH100, GH101	LifeSense® SAE 100R2AT Spiral 100R15 Hose - Premium Low Temperature Specialty Spiral 100R12 Hose Spiral 100R15 Hose - Premium EverCool™ A/C Hose All Silicone Hose* EverCool A/C Hose Biofuels
Eaton	Industrial Hose	Various	Three (3) year Limited Warranty period with the exception of private label Industrial hoses which carry a one (1) year Limited Warranty
Eaton* Synflex* Polyon* Arrow Beverage*	Thermoplastic Hose* and Thermoplastic Tubing*	Various	All thermoplastic hose and thermoplastic tubing products except for Subsea hoses which carry a two (2) year Limited Warranty
Eaton Gromelle™ Hansen™	Quick Disconnect Couplings	Various	All Quick Disconnect Couplings (except for the items listed in Level 5 of this Appendix)
Eaton Airflex	Various Clutch/Brake	Various CM Elements	All Quick Seal® products Marine Clutch

Appendix A - Level 2

The following products carry a two (2) year Limited Warranty from the warranty start date, which is the date of manufacture OR the ship date to the original customer (whichever occurs first), unless otherwise stated.

Brand	Product	Series	Description
Eaton	Xcel	XLH XLS XL2 XL4 XL6	Hydraulic Motors products except for electric or electronic components which carry a one (1) year Limited Warranty (See Level 1 of this Appendix)
Walterscheid	All Tube Fittings	Various	All Metric Tube Fittings
Airflex	Various	Various	All Airflex products not listed elsewhere in this Appendix carry a two (2) year Limited Warranty

Appendix A - Level 1

The following products carry a one (1) year Limited Warranty from the warranty start date, which is the date of manufacture OR the ship date to the original customer (whichever occurs first), unless otherwise stated.

Brand	Product	Series	Description
Eaton Vickers Char-Lynn Hydro-Line** Integrated Hydraulics	Various	Various	Electric or Electronic Components
Hydrowa	Cylinders** & Remanufactured Cylinders**	XL	All Products
Eaton	Cylinders** & Remanufactured Cylinders**	XL	All Products
Aeroquip	High Performance Hose & Fittings	Various	FBA and StartLite® hose, and all aluminum crimp and reusable fittings
Aeroquip* Eaton SEL Weatherhead* Winner (TM)	Hose, Accessories & Connectors	Various	All other products not listed as Level 5, Level 3, or Level 2 of this Appendix
Eaton Aeroquip Weatherhead	Hose Assembly Crimp machines	Various	One (1) year Limited Warranty that starts from the date of shipment to the original customer

*The Limited Warranty shall not apply to any hose product offered for sale by Eaton that is used in conjunction with products not sold by Eaton. Additionally, this Limited Warranty shall not apply to any hose product or hose fitting offered for sale by Eaton that is assembled, crimped, mended or swaged using non-Eaton assembly machines, crimp dies or swage tooling, UNLESS SPECIFICALLY AUTHORIZED IN WRITING BY EATON'S WARRANTY DEPARTMENT.

**In accordance with Eaton's Limited Warranty Supplement for Hydraulic Pump and Cylinder Repairs, Out of Warranty Eaton Cylinders and Third Party Cylinders that are repaired or remanufactured by Eaton will carry a one (1) year Limited Warranty from the warranty start date, which is the completion date of services by Eaton, and Out of Warranty Eaton Pumps that are repaired or remanufactured by Eaton will carry a two (2) year Limited Warranty from the warranty start date, which is the completion date of services by Eaton.

Limited Warranty Supplement for Hydraulic Pump and Cylinder Repairs

“Out of Warranty Eaton Pumps,” as used herein, means Eaton manufactured hydraulic pumps that are repaired or remanufactured by Eaton outside of the original warranty period applicable to such products as specified in Appendix A.

“Out of Warranty Eaton Cylinders,” as used herein, means Eaton manufactured cylinders that are repaired or remanufactured by Eaton outside of the original warranty period applicable to the cylinder products as specified in Appendix A.

“Third Party Cylinders,” as used herein, means competitive third party manufactured cylinders that are repaired or remanufactured by Eaton.

Eaton warrants to the original purchaser of Eaton’s services to repair or remanufacture Out of Warranty Eaton Pumps, Out of Warranty Eaton Cylinders, and Third Party Cylinders that services will be performed in accordance with generally accepted professional standards so that following repair or remanufacture (a) the cylinder products will be free from failure due to defects in materials provided as part of this service and workmanship provided as part of this service for a period of one (1) year after the completion date of services by Eaton, and (b) the pump products will be free from failure due to defects in materials provided as part of this service and workmanship provided as part of this service for a period of two (2) years after the completion date of services by Eaton.

If buyer claims that the services performed by Eaton violate this Limited Warranty, Eaton, upon notice promptly given, will either examine the pump or cylinder product at buyer’s site, or issue shipping instructions for return to Eaton at buyer’s expense, transportation charges prepaid.

Eaton’s sole obligation under this Limited Warranty shall be, at its option, to either (a) repair or replace defective materials provided as part of this service and correct defective workmanship provided as part of this service, or (b) refund the price paid by the buyer for that portion of the services by Eaton which is proved to violate this Limited Warranty.

This warranty does not cover reimbursement for labor, gaining access, removal, installation, temporary power or equipment, or any other expenses, which may be incurred in connection with repair or replacement.

Eaton’s obligation under this Limited Warranty is conditioned upon receipt of all payments due from buyer and prompt written notice of buyer’s warranty claim.

In no event, whether based on contract, indemnity, warranty, tort (including negligence), strict liability, or otherwise, shall Eaton be liable to the buyer for special, indirect, incidental or consequential damages whatsoever including, without limitation, loss of profit or revenue. THIS LIMITED WARRANTY IS THE BUYER’S EXCLUSIVE REMEDY AND EATON HEREBY EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

In no event shall Eaton’s total cumulative liability arising from, connected with, resulting from, or related to this Limited Warranty, or the repair or remanufacture services provided by Eaton, whether claims are based in contract, indemnity, warranty, tort (including negligence or strict liability), or otherwise, exceed the price paid by the buyer for the services on which such liability is based. The foregoing shall constitute the sole remedy of the buyer and the sole liability of Eaton.

This Limited Warranty shall not apply to any product or component thereof which has been repaired or altered by anyone other than Eaton authorized personnel in any manner so as, in Eaton’s sole judgment, to affect its serviceability, or to any product that has been subject to alteration, accident, misuse, abuse, neglect, or normal wear.

This Limited Warranty shall not apply to products which have been assembled or installed or used in a manner contrary to Eaton’s printed instructions, or due to failure to follow Eaton’s printed instructions for operation and maintenance.

Any technical assistance provided by Eaton’s personnel or representatives in system design is construed to be a proposal and not a recommendation. The responsibility for determining feasibility rests with the user and should be subject to test.

Only the terms expressed in this Limited Warranty shall apply and no distributor, corporation or individual is authorized to amend, modify or extend this Limited Warranty in any way on resale.

Eaton
Hydraulics Group USA
14615 Lone Oak Road
Eden Prairie, MN 55344
USA
Tel: 952-937-9800
Fax: 952-294-7722
www.eaton.com/hydraulics

Eaton
Hydraulics Group Europe
Route de la Longeraie 7
1110 Morges
Switzerland
Tel: +41 (0) 21 811 4600
Fax: +41 (0) 21 811 4601

Eaton
Hydraulics Group Asia Pacific
Eaton Building
No.7 Lane 280 Linhong Road
Changning District, Shanghai
200335 China
Tel: (+86 21) 5200 0099
Fax: (+86 21) 2230 7240