

### **Chelsea PTO 340 Parts Manual**

Pro Gear Chelsea 340 Series PTO parts manual to assist in identifying the parts for your Chelsea Power Take Off unit.

If you need any assistance identifying the correct Power Take Off unit for your truck and equipment, contact your Chelsea replacement part specialists at Pro Gear and Transmission.

Pro Gear stocks every part for your Parker Chelsea PTO including: PTO housings, mounts, driveshafts, gears, bearings, gaskets, cable shift cover assembly, post and plate assembly, brackets, stud kits, seal kits, lever control assembly, air shift cover assembly, direct mount pump conversion kits, stud kits including English and metric references, CAT D&H parts and much more.

Pro Gear Transmission has same day shipping and 1000's of products in stock and ready to ship internationally for your next project.

For parts or service contact the Chelsea specialists at Pro Gear & Transmission, Inc.

1 (877) 776-4600 (407) \$872-1901 parts@eprogear.com

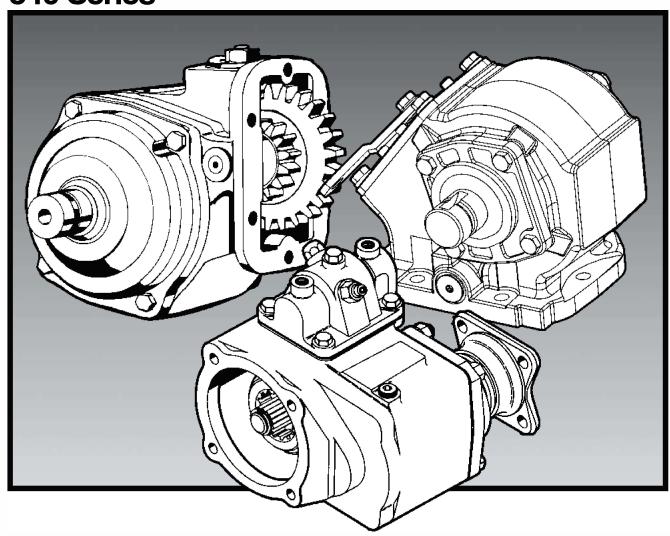


# Chelsea Parts List 340 Series

Effective: March 15, 2002

Supersedes: P41 0-340 Dated June 1995

Bulletin HY25-2340-M1/US







#### /!\ WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, 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 product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its 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 of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

#### Offer of Sale

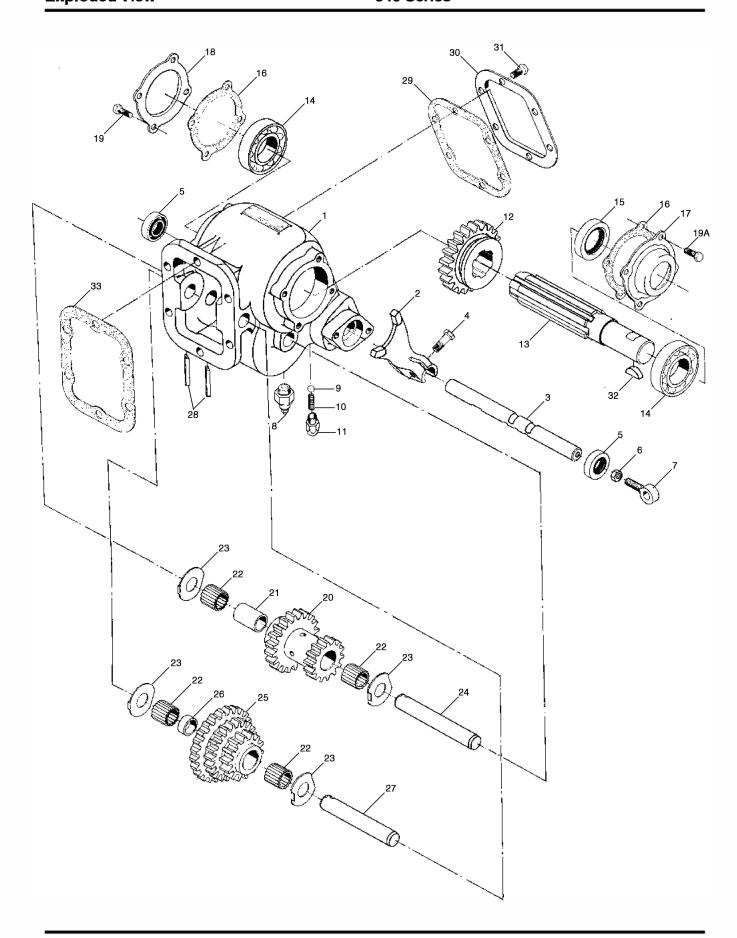
The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

© Copyright 2002, Parker Hannifin Corporation, All Rights Reserved

## Power Take-Off **340 Series**

## Bulletin HY25-2340-M1/US **Contents**

Exploded View	. 1
Bill of Materials	. 2
Air Control Parts	. 3
Installation Kit	4
Input Gear Chart	. 4
P.T.O. Housing & Shaft Dimensions	
Model Number Designation	6
Assembly Arrangements	. 6
Specifications	. 6
Offer of Sale	. 8



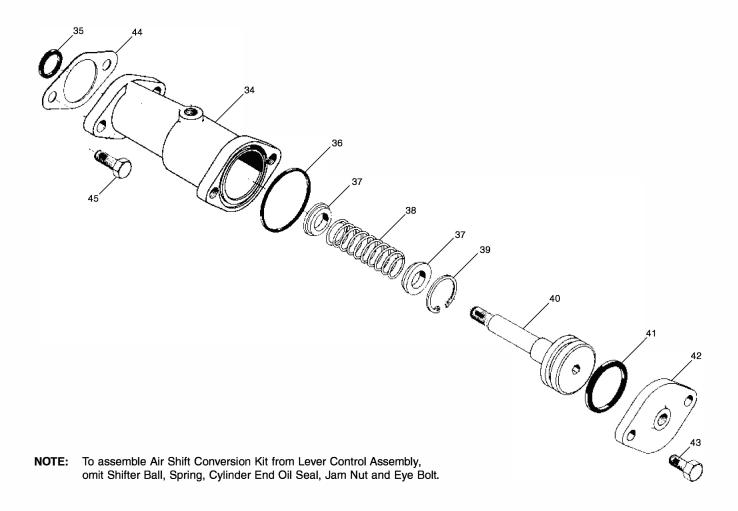
## Power Take-Off **340 Series**

#### **Bill of Materials**

Item	Part Number	Description	Quantity	
1	1-P-384	Housing, Standard Mount		
	1-P-502	Housing, Deep Mount		
2	32-P-67	Shifter Fork	1	
3	11-P-125	Shifter Shaft		
4	379687-12	Screw, Self-Locking Hex head (.375" - 16 x 1.25")		
5	28-P-207	Oil Seal (1.375" Outside Diameter)	2	
N.S.	65-P-23	Shifter Shaft Cover	1	
N.S.	378430-4	Hex Head Capscrew (.312"-18 X .50")	2	
6	500381-3	Jam Nut (.375" - 24)	1	
7	36-P-1	Eye Bolt	1	
8	379639	Indicator Switch		
9	378002	Shifter Ball (.437" Diameter)		
10	37-P-41	Shifter Spring	1	
11	378554	Spring Cap		
12	2-P-558	Gear, Output (27 Teeth)		
13	3-P-763	Driveshaft, Output		
14	550010	Ball Bearing		
15	28-P-224	Oil Seal (2.062" Outside Diameter)		
16	22-P-71	Bearing Cap Gasket	2	
17	21-P-641	Bearing Cap, Output	1	
18	21-P-46	Bearing Cap, Closed End	1	
19	378430-8	Screw, Self-Locking Hex Head (.312"-18 x .750")		
19 <b>A</b>	378430-10	Screw, Self-Locking Hex Head (.312"-18 x 1.00")	4	
00	00 00	Once Describe Idles (00 44 Teath)	4	
20	33-P-69	Gear, Reverse Idler (20-14 Teeth)		
21	14-P-33	Spacer, Roller Bearing, Reverse Idler (1.421" Diameter)		
22	550890	Roller Bearing		
23 24	31-P-80 39-P-3	Thrust WasherShaft, Reverse Idler (5.375" Long)		
24	39-7-3	Shart, neverse ruler (5.575 Long)	1	
25	See Chart Pg. 4	Gear, Input	1	
26	14-P-32	Spacer, Roller Bearing, Input Idler (.375" Diameter)	1	
27	9-P-60	Shaft, Input Idler (4.875" Long)		
28	500597-18	Roll Pin		
29	35-P-59	Cover Gasket (.032")		
30	34-P-16	Cover		
31	378431-4	Screw, Self-Locking Hex Head (.375" - 16 x .500")		
32	500007-29	Woodruff Key (.312" x 1.062")	1	
		Loose Parts		
	328948-6X	Gasket & Installation Instructions		
33	35-P-9-1	Gasket, Housing (.010")		
	35-P-9-2	Gasket, Housing (.020")	A.R.	
		P.T.O. Mounting Stud Kits		
N.S.	7170-1X	Stud Kit (340X)	1	
N.S.	7-A-140	P.T.O. Spacer (Standard Mount Only) (340X)		
N.S.	328170-95X	Stud Kit (340S & 340Z)		
		(5.55 % 5.5 <u></u> )		
		Service Kits		
	328356-24X	Gasket & Seal Kit		
	328356-27X	Seal Kit, Air Shift Cover		
	328751-1X	Wire or Lever Installation Kit	1	

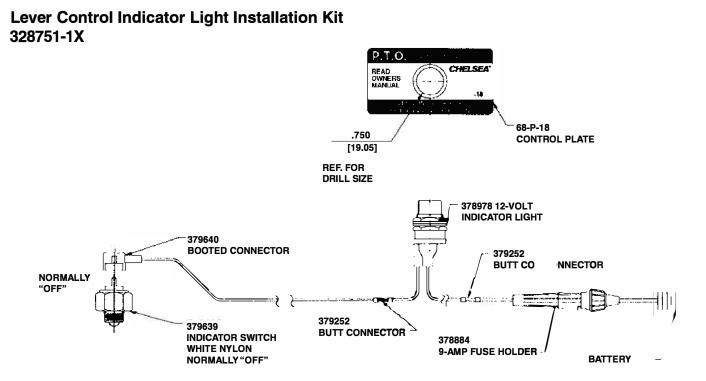
N.S. — Not Shown

A.R.—As Required



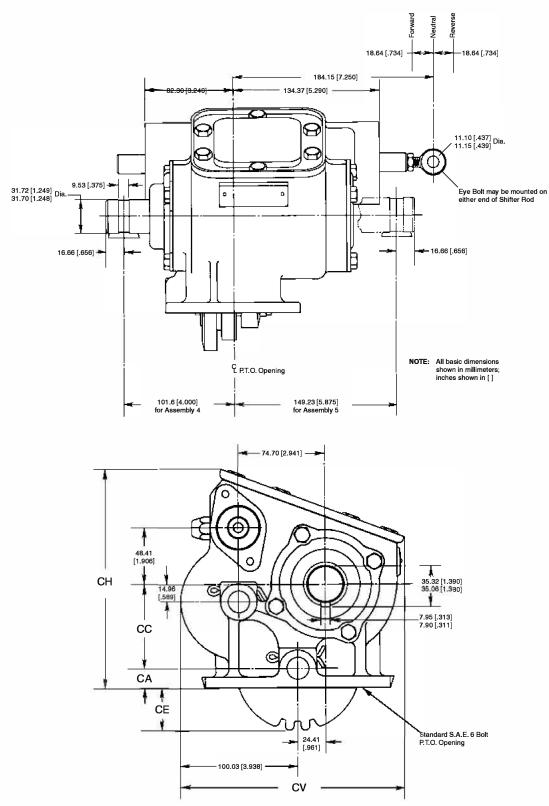
Item	Part Number	Description	Quantity
328911X		Air Shift Cover Assembly (G4 & A5)	
	328912X	Air Shift Cover Assembly (A4 & G5)	
		(Includes Items 34-43)	
	328819X	Air Shift Sub Assembly	
34	65-P-15	Cylinder	1
35	28-P-71	O-Ring (.875" Outside Diameter)	1
36	28-P-250	O-Ring (2.0" Outside Diameter)	
37	379102	Spring Retainer Washer	2
38	37-P-50	Spring	
39	379103	Retainer Ring	
40	66-P-11	Piston	
41	28-P-61	O-Ring (1.825" Outside Diameter)	
42	34-P-81	Cylinder Cap	1
43	378430-9	Cylinder CapScrew, Self-Locking Hex Head (.312" - 18 x .875")	2
44	35-P-14	Cylinder Mounting Gasket	1
45	378430-9	Screw, Self-Locking Hex Head (.312" - 18 x .875")	2
N.S.	328388-40X	Air Shift Installation Kit	1
		Conversion Kit	
	382390-92X	Lever to Air (All Assemblies)	1

N.S. — Not Shown



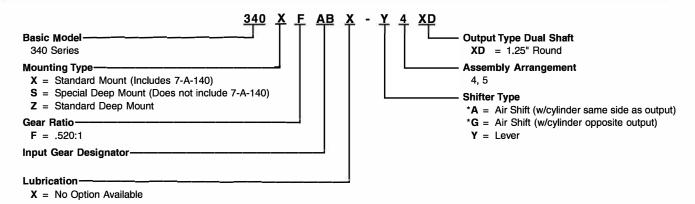
#### **Input Gear Chart**

P.T.O. Model	Input Gear	Number Teeth	Transmission Applications	Helix Angle
340*FAB	5-P-579	19-21-14	Universal 5-Pitch	Spur
340*FAH	5-P-581	23-21-24	Universal 6-Pitch	Spur
340*FAP	5-P-845	21-21-14	Spicer CM-4954A & D, ES-52-5A & D	Left Hand
340*FAR	5-P-582	21-21-14	Spicer CM60, 6000 Series	Left Hand
340*FBG	5-P-580	23-21-14	Spicer 5000 Series & ES60-5A, C & D	Left Hand
340*FBQ	5-P-720	25-21-14	Chev. CH465, SM465 & Spicer ES42-5A & 5D	Left Hand
340*FDA	5-P-634	23-21-14	Mack 2080	Spur
340*FDB	5-P-803	39-21-14	Fuller T-8607A & B, T-1106, T-1107A & B	Spur Spur
340*FDJ	5-P-921	28-21-14	Renault BDSL-2142	Left Hand
340*FDU	5-P-883	28-21-14	Fuller FS-5506, 7206A & 8206A	Left Hand
340*FEC	5-P-896	36-21-14	Zed F S5-42 Close Ratio	Left Hand
340*FED	5-P-897	34-21-14	Zed F S5-42 Wide Ratio	Left Hand
340*FES	5-P-884	22-21-14	Fuller FS-5106A, FS-6005A	Left Hand
340*FET	5-P-948	23-21-14	Fuller FS-6005B, FS-6105B	Left Hand
340*FEW	5-P-886	20-21-14	Fuller FS-3005A & B & 4005	Left Hand
340*FFN	5-P-931	26-21-14	Spicer ES52-7A, ESO65-7A	Left Hand
340*FFP	5-P-992	23-21-14	Renault G405, G406	Left Hand
340*FJW	5-P-1404	23-21-14	Eaton Left Hand	
340*FHY	5-P-1245	26-21-14	Left Hand	
340*FJU	5-P-1377	25-21-14		Left Hand
340SFDM	5-P-726	16-21-14	CL-450,CL-455	Left Hand
340SFDMX	5-P-727	17-21-14	CL-451	Left Hand



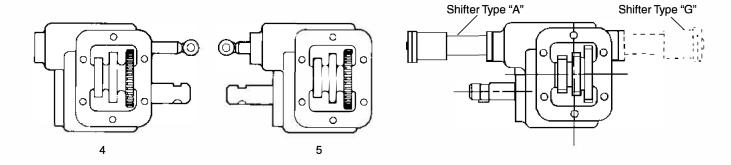
P.T.O. Series	CA	СС	CE	СН	cv
340X (with 7-A-140)	.798	2.843	1.280	7.515	7.562
340S (without 7-A-140)	.658	2.843	1.420	7.375	7.562
340Z	.573	2.843	1.505	7.290	7.562

#### **Model Number Designation**



\* Remove Ball & Spring (Items #9 & 10) when air shift cylinder is added to unit. Neutral spring in air cylinder does not develop enough pressure to over come Spring & Poppet ball, in poppet cap

#### **Assembly Arrangements**



#### **Specifications**

Torque Rating	200 Lbs. Ft.*
Horsepower Rating 500 RPM of Output Shaft 1000 RPM of Output Shaft	19* 38 *
Approximate Weight	38 Lbs.

<sup>\*</sup> Based on Intermittent Service

Notes

The items described in this document and other documents or descriptions provided by Parker Hannifin Corporation, its subsidiaries and its authorized distributors are hereby offered for sale at prices to be established by Parker Hannifin Corporation, its subsidiaries and its authorized distributors. This offer and its acceptance by any customer ("Buyer") shall be governed by all of the following Terms and Conditions. Buyer's order for any such items, when communicated to Parker Hannifin Corporation, its subsidiary or an authorized distributor ("Seller") verbally or in writing, shall constitute acceptance of this offer.

- 1. Terms and Conditions of Sale: All descriptions, quotations, proposals, offers, acknowledgments, acceptances and sales of Seller's products are subject to and shall be governed exclusively by the terms and conditions stated herein. Buyer's acceptance of any offer to sell is limited to these terms and conditions. Any terms or conditions in addition to, or inconsistent with those stated herein, proposed by Buyer in any acceptance of an offer by Seller, are hereby objected to. No such additional, different or inconsistent terms and conditions shall become part of the contract between Buyer and Seller unless expressly accepted in writing by Seller. Seller's acceptance of any offer to purchase by Buyer is expressly conditional upon Buyer's assent to all the terms and conditions stated herein, including any terms in addition to, or inconsistent with those contained in Buyer's offer, Acceptance of Seller's products shall in all events constitute such assent.
- 2. Payment: Paymentshall be made by Buyer net 30 days from the date of delivery of the items purchased hereunder. Amounts not timely paid shall bear interest at the maximum rate permitted by law for each month or portion thereof that the Buyer is late in making payment. Any claims by Buyer for omissions or shortages in a shipment shall be waived unless Seller receives notice thereof within 30 days after Buyer's receipt of the shipment.
- 3. Delivery: Unless otherwise provided on the face hereof, delivery shall be made F.O.B. Seller's plant. Regardless of the method of delivery, however, risk of loss shall pass to Buyer upon Seller's delivery to a carrier. Any delivery dates shown are approximate only and Seller shall have no liability for any delays in delivery.
- 4. Warranty: Seller warrants that the items sold hereunder shall be free from defects in material or workmanship for a period of:
- (A) All Power Take-Off units one (1) year from date of installation.
- (B) Except 267, 277, 278, 242, 244, 245, 250, 251 and 859 series two (2) years from date of installation. THIS WARRANTY COMPRISES THE SOLE AND ENTIRE WARRANTY PERTAINING TO ITEMS PROVIDED HEREUNDER. SELLER MAKES NO OTHER WARRANTY, GUARANTEE, OR REPRESENTATION OF ANY KIND WHATSOEVER. ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO, MERCHANTABILITY AND FITNESS FOR PURPOSE, WHETHER EXPRESS, IMPLIED, OR ARISING BY OPERATION OF LAW, TRADE USAGE, OR COURSE OF DEALING ARE HEREBY DISCLAIMED. NOTWITHSTANDINGTHE FOREGOING, THERE ARE NO WARRANTIES WHATSOEVER ON ITEMS BUILT OR ACQUIRED WHOLLY OR PARTIALLY, TO BUYER'S DESIGNS OR SPECIFICATIONS.
- 5. Limitation of Remedy: SELLER'S LIABILITY ARISING FROM OR IN ANY WAY CONNECTED WITH THE ITEMS SOLD OR THIS CONTRACT SHALL BE LIMITED EXCLUSIVELY TO REPAIR OR REPLACEMENT OF THE ITEMS SOLD OR REFUND OF THE PURCHASE PRICE PAID BY BUYER, AT SELLER'S SOLE OPTION. IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY KIND OR NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS ARISING FROM OR IN ANY WAY CONNECTED WITH THIS AGREEMENT OR ITEMS SOLD HEREUNDER, WHETHER ALLEGED TO ARISE FROM BREACH OF CONTRACT, EXPRESS OR IMPLIED WARRANTY, OR IN TORT, INCLUDING WITHOUT LIMITATION, NEGLIGENCE, FAILURE TO WARN OR STRICT LIABILITY.
- **6. Changes, Reschedules and Cancellations:** Buyer may request to modify the designs or specifications for the items sold hereunder as well as the quantities and delivery dates thereof, or may request to cancel all or part of this order, however, no such requested modification or cancellation shall become part of the contract between Buyer and Seller unless accepted by Seller in a written amendment to this Agreement. Acceptance of any such requested modification or cancellation shall be at Seller's discretion, and shall be upon such terms and conditions as Seller may require.
- 7. Special Tooling: A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture items sold pursuant to this contract. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the items sold hereunder, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller shall

have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

- 8. Buyer's Property: Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer or any other items which become Buyer's property, may be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer placing an order for the items which are manufactured using such property, Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.
- 9. Taxes: Unless otherwise indicated on the face hereof, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of the items sold hereunder. If any such taxes must be paid by Seller or if Seller is liable for the collection of such tax, the amountthereof shall be in addition to the amounts for the items sold. Buyer agrees to pay all such taxes or to reimburse Seller therefore upon receipt of its invoice. If Buyer claims exemption from any sales, use or other tax imposed by any taxing authority, Buyer shall save Seller harmless from and against any such tax, together with any interest or penalties thereon which may be assessed if the items are held to be taxable.
- 10. Indemnity For Infringement of Intellectual Property Rights: Seller shall have no liability for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Part 10. Seller will defend and indemnify Buyer against allegations of infringement of U.S. Patents, U.S. Trademarks, copyrights, trade dress and trade secrets (hereinafter 'Intellectual Property Rights'). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that an item sold pursuant to this contract infringes the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If an item sold hereunder is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and option, procure for Buyer the right to continue using said item, replace or modify said item so as to make it noninfringing, or offer to accept return of said item and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to items delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any item sold hereunder. The foregoing provisions of this Part 10 shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.
- If a claim is based on information provided by Buyer or if the design for an item delivered hereunder is specified in whole or in part by Buyer, Buyer shall defend and indemnify Seller for all costs, expenses or judgments resulting from any claim that such item infringes any patent, trademark, copyright, trade dress, trade secret or any similar right.
- 11. Force Majeure: Seller does not assume the risk of and shall not be liable for delay or failure to perform any of Seller's obligations by reason of circumstances beyond the reasonable control of Seller (hereinafter 'Events of Force Majeure'). Events of Force Majeure shall include without limitation, accidents, acts of God, strikes or labor disputes, acts, laws, rules or regulations of any government or government agency, fires, floods, delays or failures in delivery of carriers or suppliers, shortages of materials and any other cause beyond Seller's control.
- 12. Entire Agreement/Governing Law: The terms and conditions set forth herein, together with any amendments, modifications and any differentterms or conditions expressly accepted by Seller in writing, shall constitute the entire Agreement concerning the items sold, and there are no oral or other representations or agreements which pertain there/to. This Agreement shall be governed in all respects by the law of the State of Ohio. No actions arising out of the sale of the items sold hereunder or this Agreement may be brought by either party more than two (2) years after the cause of action accrues.

9/01-P



Parker Hannifin Corporation Chelsea Products Division 8225 Hacks Cross Road Olive Branch, Mississippi 38654 USA Tel: (662) 895-1011 Fax: (662) 895-1019 www.parker.com/chelsea

FP 03/02 3M