Effective: Supercedes: HY25-1670-M1/US May 2024 HY25-1670-M1/US November 2022



## Owner's Manual Adapter Gears

626, 628, 630, 645 Series



ENGINEERING YOUR SUCCESS.

### 🖄 WARNING – User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS 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 or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

### **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.

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di(2-ethylhexyl) phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive A harm. For more information go to www.P65Warnings.ca.gov

### **Patent Information**

The Chelsee® Power Take-Off or its components shipped with this owner's manual may be manufactured under one or more of the following U.S. patents: 7,159,701 7,007,565 6,962,093 1,326,036 60,321,840.7 9494227 B2 11,149,796 B2 Other patents pending.

© Copyright 2024, Parker Hannifin Corporation, All Rights Reserved



### **General Information**

	Foreword1		
	Safety Information1-4		
	PTO Shifting Procedure & Precautions5		
	PTO Maintenance6		
Installation Instructions			
	Mounting the Adapter Gear Assembly7-10		
	Checking Backlash		
Off	er of Sale		





## Foreword

Since it is our major objective to show you how to get additional and more profitable miles from truck, tractor, and trailer components, we want to provide you with information on the installation of Chelsea Power Take-Offs.

We all realize that an inadequate transmission will overwork any Power Take-Off in a very short period of time. A mismatched transmission and PTO combination can result in unsatisfactory performance of the equipment right from the start.

Before you order new trucks, be sure that you're getting the right transmission and PTO combination. This is vital for efficient performance and adequate power. To help you select the proper type, size, and design of PTO, discuss your specific requirements with a Chelsea PTO representative. They know their products and have easy access to equipment, transmission, and Power Take-Off manufacturers. They can tell you everything you need to know about power, at the right time, before you specify components.

## **Safety Information**

These instructions are intended for the safety of the system designer, installer, operator, and supporting personnel. If you have any additional questions after reading the instructions below, please reach out to your local Chelsea representative.

### **General Safety Information**

### To prevent injury to yourself and/or damage to the equipment:

- Carefully read all owner's manuals, service manuals, and/or other instructions.
- Always follow procedures using proper tools and safety equipment.
- Ensure proper training is received prior to attempting to install equipment.
- Always block any raised or moving device that may injure a person working on or under a vehicle.
- Never work alone while under a vehicle, repairing equipment, or maintaining equipment.
- Always use proper components in applications for which they are approved.
- Never use worn-out or damaged components.
- Never operate the controls of the PTO or other driven equipment from any position that could result in getting caught in the moving machinery.

### This symbol warns of possible personal injury.



## Safety Information (Continued)

### Proper Matching of PTO

**WARNING:** A Power Take-Off must be properly matched to the vehicle transmission and to the auxiliary equipment being powered. An improperly matched Power Take-Off could cause severe damage to the vehicle transmission, the auxiliary driveshaft, and/or the auxiliary equipment being powered. Damaged components or equipment could malfunction causing serious personal injury to the vehicle operator or to others nearby.

### To avoid personal injury and/or equipment damage:

- Always refer to Chelsea's catalogs, literature, and owner's manuals.
- Follow Chelsea's recommendations when selecting, installing, repairing, or operating a PTO.
- Never attempt to use a PTO that is not specifically recommended by Chelsea for the vehicle, transmission, and application.
- Always match the PTO's specified output capabilities with the requirements of the equipment to be powered.
- Never exceed the maximum speed listed in Chelsea's Applications Catalog.

### **Rotating Auxiliary Driveshafts**



- Rotating auxiliary driveshafts can cause serious injury or death by snagging clothes, skin, hair, hands etc.
- Do not go under the vehicle when the engine is running.
- Do not work on or near an exposed shaft when the engine is running.
- Shut off the engine before working on the PTO or drive equipment.
- Exposed rotating driveshafts must be guarded.

### **Guarding Auxiliary Driveshafts**

**WARNING:** We strongly recommend that a Power Take-Off and a directly mounted pump be used to eliminate the auxiliary driveshaft whenever possible. If an auxiliary driveshaft is used and remains exposed after installation, it is the responsibility of the vehicle designer to specify guard(s) and PTO installer to install guard(s).

### This symbol warns of possible personal injury.



## Safety Information (Continued)

### Using Set Screws

**WARNING:** Auxiliary driveshafts may be installed with either recessed or protruding set screws. If you choose a square head set screw, you should be aware that it will protrude above the hub of the yoke and may be a point where clothes, skin, hair, hands etc. could be snagged. A socket head -+set screw, which may not protrude above the hub of the yoke, does not permit the same amount of torquing as does a square head set screw. Also a square head set screw, if used with a lock wire, will prevent loosening of the screw caused by vibration. Regardless of the choice made with respect to a set screw, an exposed rotating auxiliary driveshaft must be guarded.

### **IMPORTANT: Safety Information and Owner's Manual**

Chelsea Power Take-Offs are packaged with safety information decals, instructions, and an owner's manual. These items are located in the envelope with the PTO mounting gaskets. Also, safety information and installation instructions are packaged with some individual parts and kits. **Be sure to read the owner's manual before installing or operating the PTO.** Always install the safety information decals according to the instructions provided. Place the owner's manual in the vehicle's glove compartment.

# WARNING: Operating the PTO with the Vehicle in Motion

Some Power Take-Offs may be operated while the vehicle is in motion. PTOs must be properly selected to operate at highway speeds, correctly matched to the vehicle's transmission, as well as the requirements of the driven equipment.

If in doubt about the PTO specifications and capabilities, avoid operating the PTO when the vehicle is in motion. Improper application and/or operation can cause serious personal injury as well as premature failure of the vehicle, driven equipment, and PTO.

Always remember to disengage the PTO when the driven equipment is not in operation.

This symbol warns of possible personal injury.

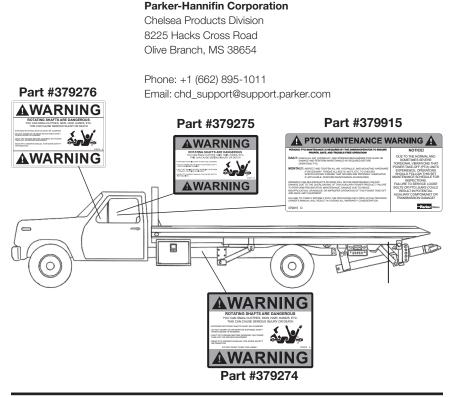


## Safety Information (Continued)

### Chelsea PTO Safety Label Instructions

- 1. The two black and orange on white 5" x 7" pressure sensitive vinyl labels (PN 379274) must be placed one on each side of the vehicle in a position that would be **HIGHLY** visible to anyone that would go under the truck near the PTO rotating shaft. If the vehicle is to be painted after these labels are installed, cover them with two blank masking covers. Remove the masking covers after painting.
- 2. Place the one black and orange on white 3.5" x 5" pressure sensitive vinyl label (PN 379275) on the sun visor nearest the operator of the vehicle.
- 3. Place the one red and white with black lettering 3.5" x 7" sensitive vinyl label (PN 379915) on the sun visor next to the above label (PN 379275).
- 4. Place the one white and black heavy-duty card (PN 379276) in the vehicle glove box in a position highly visible to the operator. For example, try to place this card on top of whatever may be in the glove box.

If you require additional labels, please order part number 328946X at no charge from your local Chelsea representative or send request direct to:





Chelsea

## **PTO Shifting Procedure & Precautions**

**CAUTION:** This vehicle is equipped with a Power Take-Off. Shut engine off before working on the Power Take-Off or getting below the vehicle. Consult the operating instructions before using the PTO (See sun visor).

Engage the PTO with the engine at idle speed.

### **IMPORTANT:**

Failure to follow the proper shifting or operating sequences will result in premature PTO failure with possible damage to other equipment.

WARNING: Cold Weather Operation of PowerShift PTOs

During extreme cold weather operation [32°F (0°C) and lower], a disengaged PowerShift Power Take-Off can momentarily transmit high torque that will cause unexpected output shaft rotation. This is caused by the high viscosity of the transmission oil when it is extremely cold. As slippage occurs between the Power Take-Off clutch plates, the oil will rapidly heat up and the viscous drag quickly decreases.

The rotation of the PTO's output shaft could cause unexpected movement of the driven equipment, resulting in serious personal injury, death, or equipment damage.

### To avoid personal injury or equipment damage:

- Driven equipment must have separate controls.
- Driven equipment must be left in the disengaged position when not in operation.
- Driven equipment must not be operated until the vehicle is allowed to warm up.

A This symbol warns of possible personal injury.



### **Power Take-Off Maintenance**

Due to the normal and sometime severe torsional vibrations that PTOs experience, operators should follow a set maintenance schedule for inspections. Failure to service loose bolts or PTO leaks could result in potential auxiliary Power Take-Off or transmission damage.

Periodic PTO maintenance is required by the owner/operator to ensure proper, safe, and trouble-free operation.

- **Daily:** Check all air, hydraulic and working mechanisms before operating PTO and perform maintenance as required.
- **Monthly:** Inspect for possible leaks and tighten all air, hydraulic, and mounting hardware if necessary. Torque all bolts, nuts, etc. to Chelsea's specifications. If applicable, ensure that splines are properly lubricated. Perform maintenance as required.

With regards to the direct mounted pump splines, the PTO requires the application of a specially formulated anti-fretting grease. This grease must be specified for both high pressure and high temperature applications. The addition of the grease has been proven to reduce the effects of torsional vibrations, which result in fretting corrosion on the PTO's internal splines as well as the pump's external splines. Fretting corrosion appears as a "rusting and wearing" of the pump shaft splines. Severe duty applications, which require long PTO running times and high torque, may require more frequent regreasing. Continuous duty applications with light loads require frequent regreasing due to the higher number of running hours, an example of this is utility trucks. It is important to note that service intervals will vary for every application and they are the responsibility of the end user of the product. Chelsea also recommends that you consult your pump's owner's manual and technical services for their maintenance guidelines. Fretting grease can only reduce its effects on components.

Chelsea offers anti-fretting grease to our customers in two package sizes:

- 5/8 fluid ounce tube (PN 379688) Provided with PTO where applicable
- 14-ounce grease cartridge (PN 379831)

Warranty: Failure to comply entirely with the provisions set forth in the appropriate Owner's Manual will result in voiding of warranty consideration.



## Mounting the Adapter Gear Assembly

Because it is impossible to reach the PTO driver gear in the transmission, some PTO applications require adapter assemblies.

A geared adapter assembly changes the rotation of the PTO, which may be necessary for driving pumps or other accessory equipment. Using an adapter can some times compensate for obstructions, such as a bulge in the transmission, exhausts pipes, or motor mounts.

1. Drain the oil from the transmission and remove the PTO aperture cover plate (**Fig. 1**).

**CAUTION:** The exhaust pipes and the oil are hot so avoid contact with them.

2. Discard the cover plate and cover plate gasket, and then clean the aperture pad using a putty knife or wire brush (**Fig. 2**).

**NOTE:** Stuff a rag in the aperture opening to prevent dirt from entering the transmission while you are cleaning it.

3. Install the proper studs (furnished with the PTO) in the PTO aperture pad using a stud driver. Studs may have either interference fit threads (plain) or pre-applied locking/sealing compound (**Fig. 3**).



Typical Adapter Assembly Configurations



Figure 1

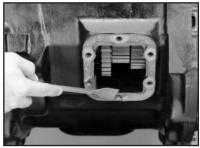


Figure 2

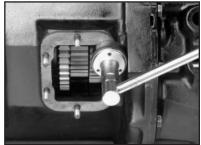


Figure 3

### General Rule:

A Chelsea .010" (.25 mm) gasket will change backlash approximately .006" (.15 mm), and a .020" (.50 mm) gasket changes backlash approximately .012" (.30 mm).



## Mounting the Adapter Gear Assembly (Continued)

 Install the six or eight studs until the shoulder of the stud is flush with the transmission mounting surface (Fig. 4).

**CAUTION:** Over tightening of studs or running the shoulder past the transmission mounting surface may damage the stud and/or transmission threads.

 Mount the adapter to the transmission with the gaskets provided. Then check and set backlash between the adapter and the transmission (Fig. 5).

**NOTE:** See page 11 for checking proper backlash.

**NOTE:** If installing a 630-02 adapter for the Eaton I-Brake, install adapter with the gasket provided (part #35-P-96) with 630-02. There is no need to set backlash when using this gasket. Torque flange nuts at this time (see page 9, item 10 for proper torque specs). After mounting adapter refer to installation instructions (379985) for proper I-Brake installation.

- Remove the adapter, gaskets, and filler block, if required, from the transmission. Keep the gaskets and filler block as a package (Fig. 6).
- Bench mount the adapter to the PTO Install the appropriate length studs in the adapter body (Fig. 7).



Figure 4



Figure 5

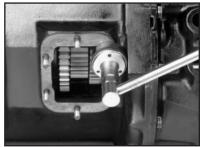


Figure 6

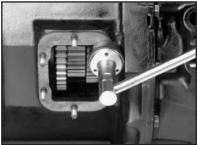


Figure 7



## Mounting the Adapter Gear Assembly (Continued)

- Set the proper backlash between the adapter and PTO After backlash is set remove PTO from adapter and set aside PTO and gaskets. See page 11 for setting proper backlash (Fig. 8).
- Secure Adapter to the transmission. Use Self Locking nuts provided with Adapter (Fig. 9). Torque all flange nuts to their proper specifications.

**NOTE:** Self Locking nuts do not require lock washers.

**NOTE:** See torque specs in step 10.

- 10. Fasten the PTO to the Adapter. Torque the self locking nuts to their proper specifications.
  - 379744 3/8" for 6-Bolt applications 35-40 lb-ft (4.83-5.52 kg.m.)
  - 379745 7/16"-20 for 8-Bolt applications 55-60 lb-ft (7.59-8.28 kg.m.) Torque cap screws to their proper specifications.
  - 6-Bolt to 30-35 lb-ft (4.14-4.84 kg.m.)
  - 8-Bolt to 45-50 lb-ft (6.22-6.91 kg.m.) (Fig 10).

**NOTE:** If installing the Eaton Inertia Brake, refer to installation instructions (379985).



Figure 8



Figure 9

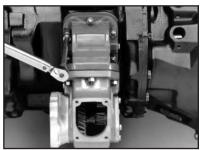


Figure 10



## Mounting the Adapter Gear Assembly (Continued)

11. Run the PTO momentarily to check for noise.

**CAUTION:** The transmission and PTO have no lubrication at this time so running time should be as short as possible.

**NOTE:** If the PTO whines, it may be mounted too tight - too little backlash. This is an indication that gaskets should be added.

If the PTO clatters, it may be mounted too loose - too much backlash. This is an indication that gaskets should be removed.

12. Refill the transmission to its appropriate fill level. Normally, the addition of a six bolt PTO will require an additional quart of oil.



## **Checking Backlash**

To check for proper backlash on PTOs with shift cover.

- 1. Remove the PTO shift housing and/ or inspection plate.
- Mount the dial indicator so that it registers movement of the input gear (driven gear) of the PTO (Fig. 10).

**NOTE:** See Figure 11 for proper location of dial indicator contact point. (Two common type dial indicators shown).

- Hold the PTO driver gear in transmission with a screwdriver or bar and rock the PTO input gear (driven gear) back and forth with your hand. Note the total movement on the dial indicator.
- Establish backlash at .006"-.012" [.15 mm-.30 mm] by adding or subtracting gaskets.

General rule: A Chelsea .010" gasket will change backlash approximately .006". A .020" gasket changes backlash approximately .012".

 Replace the shift housing and/or inspection plate and retorque
 (4) four cap screws to 16-20 lb-ft (2.21-2.76 kg meters).



Figure 10

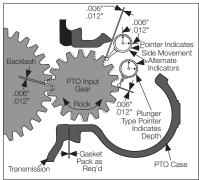


Figure 11



Notes				



	As used herein, the	Seller:	means Parker-Hannifin
	have the meanings		Corporation, all
indicated.			divisions, subsidiaries
Buyer:	means any customer		and businesses selling
	receiving a Quote for		products under these
	Products.		terms.
Buyer's Pro	perty:	Seller's IP:	means patents,
-	means any tools,		trademarks, copyrights,
	patterns, plans,		or other intellectual
	drawings, designs,		property rights relating
	specifications materials,		to the Products,
	equipment, or		including without
	information furnished by		limitation, names,
	Buyer, or which are or		designs, images,
	become Buyer's		drawings, models,
	property.		Software, templates,
Confidentia	I Information:		information, any
••••••••	means any technical,		improvements or
	commercial, or other		creations or other
	proprietary information		intellectual property
	of Seller, including,		developed prior to or
	without limitation,		during the relationship
	pricing, technical		
	drawings or prints and/	Services:	contemplated herein.
	or part lists, which has	Services:	means any services to
	been or will be	Coffmense	be provided by Seller.
	disclosed, delivered,	Software:	means any software
	or made available,		related to the Goods,
	whether directly or		whether embedded or
	indirectly, to Buyer.	0	separately downloaded.
Goods:	means any tangible	Special Too	
doous.	part, system or		means equipment
	component to be		acquired by Seller or
			otherwise owned by
Intellectual	supplied by Seller. Property Rights:		Seller necessary to
intenectual	means any patents,		manufacture Goods,
	trademarks, copyrights,		including but not limited
	trade dress, trade		to tools, jigs, and
	secrets or similar rights.	<b>T</b> e #***	fixtures.
Products:	means the Goods,	Terms:	means the terms and
Flouucis.	Services and/or		conditions of this
	Software as described	<b>о т</b>	Offer of Sale.
	in a Quote.		ales of Products by Seller
Quote:	means the offer or	will be governed by, and are expressly	
Quote:			n Buyer's assent to, these
proposal made by Seller Terms. These Terms are incor			
to Buyer for the supply			ded by Seller to Buyer.
	of Products.		any Products whether
			o Seller verbally, in writing,
		by algotrapia dat	to interface or other

(Continued on Next Page)

by electronic data interface or other electronic commerce, shall constitute

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di (2-ethylhexyl) phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov



acceptance of these Terms. Seller objects to any contrary or additional terms or conditions of Buyer. Reference in Seller's order acknowledgement to Buyer's purchase order or purchase order number shall in no way constitute an acceptance of any of Buyer's terms or conditions of purchase. Any Quote made by Seller to Buver shall be considered a firm and definite offer and shall not be deemed to be otherwise despite any language on the face of the Quote. Seller reserves all rights to accept or reject any purported acceptance by Buyer to Seller's Quote if such purported acceptance attempts to vary the terms of the Quote. If Seller ships Products after Buyer issues an acceptance to the Quote, any additional or different terms proposed by Buyer will not become part of the parties' business relationship unless agreed to in a writing that is signed by an authorized representative of Seller, excluding email correspondence. If the transaction proceeds without such agreement on the part of Seller, the business relationship will be governed solely by these Terms and the specific terms in Seller's Quote. 3. Price; Payment. The Products set forth in the Quote are offered for sale at the prices indicated in the Quote. Unless otherwise specifically stated in the Quote, prices are valid for thirty (30) days and do not include any sales, use, or other taxes or duties. Seller reserves the right to modify prices for any reason and at any time by giving ten (10) days prior written notice. Unless otherwise specified by Seller, all prices are F.C.A. Seller's facility (INCOTERMS 2020). All sales are contingent upon credit approval and full payment for all purchases is due thirty (30) days from the date of invoice (or such date as may be specified in the Quote). Under any circumstances, Buyer may not withhold or suspend payment of any amounts due and payable as a deduction, set-off or recoupment of any amount, claim or dispute with Seller. Unpaid invoices beyond the specified payment date incur interest at the rate of 1.5% per month or the maximum allowable rate under applicable law. Seller reserves the right to require advance payment or provision of securities for first and

subsequent deliveries if there is any doubt, in Seller's sole determination, regarding the Buyer's creditworthiness or for other business reasons. If the requested advance payment or securities are not provided to Seller's satisfaction, Seller reserves the right to suspend performance or reject the purchase order, in whole or in part, without prejudice to Seller's other rights or remedies, including the right to full compensation. Seller may revoke or shorten any payment periods previously granted in Seller's sole determination. The rights and remedies herein reserved to Seller are cumulative and in addition to any other or further rights and remedies available at law or in equity. No waiver by Seller of any breach by Buyer of any provision of these terms will constitute a waiver by Seller of any other breach of such provision.

4. Shipment; Delivery; Title and Risk of Loss. All delivery dates are approximate, and Seller is not responsible for damages or additional costs resulting from any delay. All deliveries are subject to our ability to procure materials from our suppliers. Regardless of the manner of shipment, delivery occurs and title and risk of loss or damage pass to Buyer, upon placement of the Products with the carrier at Seller's facility. Unless otherwise agreed prior to shipment and for domestic delivery locations only. Seller will select and arrange, at Buyer's sole expense, the carrier and means of delivery. When Seller selects and arranges the carrier and means of delivery, freight and insurance costs for shipment to the designated delivery location will be prepaid by Seller and added as a separate line item to the invoice. Buyer shall be responsible for any additional shipping charges incurred by Seller due to Buyer's acts or omissions. Buver shall not return or repackage any Products without the prior written authorization from Seller, and any return shall be at the sole cost and expense of Buver.

**5.** <u>Warranty.</u> The warranty for the Products is as follows:
(i) Seller warrants that all products

(Continued on Next Page)



sold conform to the applicable Parker Chelsea standard specification for the lesser period of 2 years (24 Months) from date of service or 2-1/2 years (30 Months) from date of build (as marked on the product name plate; (ii) Services shall be performed in accordance with generally accepted practices and using the degree of care and skill that is ordinarily exercised and customary in the field to which the Services pertain and are warranted for a period of six (6) months from the date of completion of the Services; and (iii) Software is only warranted to perform in accordance with applicable specifications provided by Seller to Buyer for ninety (90) days from the date of delivery or, when downloaded by a Buyer or end-user, from the date of the initial download. All prices are based upon the exclusive limited warrantv stated above, and upon the following disclaimer: EXEMPTION CLAUSE: DISCLAIMER OF WARRANTY. CONDITIONS. REPRESENTATIONS: THIS WARRANTY IS THE SOLE AND ENTIRE WARRANTY. CONDITION, AND REPRESENTATION, PERTAINING TO PRODUCTS. SELLER DISCLAIMS ALL OTHER WARRANTIES, CONDITIONS, AND REPRESENTATIONS, WHETHER STATUTORY. EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THOSE RELATING TO DESIGN, NONINFRINGEMENT, MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE. SELLER DOES NOT WARRANT THAT THE SOFTWARE IS ERROR-FREE **OR FAULT-TOLERANT, OR THAT BUYER'S USE THEREOF WILL BE** SECURE OR UNINTERRUPTED. UNLESS OTHERWISE AUTHORIZED IN WRITING BY SELLER, THE SOFTWARE SHALL NOT BE USED IN CONNECTION WITH HAZARDOUS **OR HIGH-RISK ACTIVITIES OR** ENVIRONMENTS. EXCEPT AS EXPRESSLY STATED HEREIN. ALL PRODUCTS ARE PROVIDED "AS IS".

### 6. Claims; Commencement of

Actions. Buyer shall promptly inspect all Products upon receipt. No claims for shortages will be allowed unless reported to Seller within ten (10) days of delivery. Buyer shall notify Seller of any alleged breach of warranty within thirty (30) days after the date the non-conformance is or should have been discovered by Buyer. Any claim or action against Seller based upon breach of contract or any other theory, including tort, negligence, or otherwise must be commenced within twelve (12) months from the date of the alleged breach or other alleged event, without regard to the date of discovery.

LIMITATION OF LIABILITY. IN 7. THE EVENT OF A BREACH OF WARRANTY, SELLER WILL, AT ITS OPTION. REPAIR OR REPLACE THE NON-CONFORMING PRODUCTS, **RE-PERFORM THE SERVICES, OR REFUND THE PURCHASE PRICE PAID** WITHIN A REASONABLE PERIOD OF TIME. IN NO EVENT IS SELLER LIABLE FOR ANY SPECIAL. INDIRECT. INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING ANY LOSS OF **REVENUE OR PROFITS. WHETHER** BASED IN CONTRACT, TORT OR OTHER LEGAL THEORY. IN NO EVENT SHALL SELLER'S LIABILITY UNDER ANY CLAIM MADE BY BUYER EXCEED THE PURCHASE PRICE PAID FOR THE PRODUCTS.

8. Confidential Information.

Buyer acknowledges and agrees that Confidential Information has been and will be received in confidence and will remain the property of Seller. Buyer further agrees that it will not use Seller's Confidential Information for any purpose other than for the benefit of Seller and shall return all such Confidential Information to Seller within thirty (30) days upon request.

**9.** <u>Loss to Buyer's Property.</u> Buyer's Property will be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without

(Continued on Next Page)

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di (2-ethylhexyl) phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov



Buyer ordering the Products manufactured using Buyer's Property. Also, Seller shall not be responsible for any loss or damage to Buyer's Property while it is in Seller's possession or control.

 Special Tooling. Seller may impose a tooling charge for any Special Tooling. Special Tooling shall be and remain Seller's property. In no event will Buyer acquire any interest in the Special Tooling, even if such Special Tooling has been specially converted or adapted for manufacture of Goods for Buyer and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller has the right to alter, discard or otherwise dispose of any Special Tooling or other property owned by Seller in its sole determination at any time.
 Security Interest. To secure payment of all automation at any time.

of all sums due from Buyer, Seller retains a security interest in all Products delivered to Buyer and, Buyer's acceptance of these Terms is deemed to be a Security Agreement under the Uniform Commercial Code. Buyer authorizes Seller as its attorney to execute and file on Buyer's behalf all documents Seller deems necessary to perfect Seller's security interest.

12. User Responsibility. Buyer, through its own analysis and testing, is solely responsible for making the final selection of the Products and assuring that all performance, endurance, maintenance, safety and warning requirements of the application of the Products are met. Buver must analyze all aspects of the application and follow applicable industry standards, specifications, and any technical information provided with the Quote or the Products, such as Seller's instructions, guides and specifications. If Seller provides options of or for Products based upon data or specifications provided by Buver. Buver is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the Products. In the event Buver is not the end-user of the Products, Buyer will ensure such end-user complies with this paragraph.

13. <u>Use of Products, Indemnity</u> <u>by Buyer.</u> Buyer shall comply with all instructions, guides and specifications provided by Seller with the Quote or the Products. If Buyer uses or resells the Products in any way prohibited by Seller's instructions, guides or specifications, or Buyer otherwise fails to comply with Seller's instructions, guides and specifications, Buyer acknowledges that any such use, resale, or non-compliance is at Buyer's sole risk. Further, Buyer shall indemnify, defend, and hold Seller harmless from any losses, claims, liabilities, damages, lawsuits, judgments and costs (including attorney fees and defense costs), whether for personal injury, property damage, intellectual property infringement or any other claim, arising out of or in connection with: (a) improper selection, design, specification, application, or any misuse of Products; (b) any act or omission, negligent or otherwise, of Buyer; (c) Seller's use of Buyer's Property; (d) damage to the Products from an external cause, repair or attempted repair by anyone other than Seller, failure to follow instructions, guides and specifications provided by Seller, use with goods not provided by Seller, or opening, modifying, deconstructing, tampering with or repackaging the Products; or (e) Buyer's failure to comply with these Terms, including any legal or administrative proceedings, collection efforts, or other actions arising from or relating to such failure to comply. Seller shall not indemnify Buyer under any circumstance except as otherwise provided in these Terms.

**14.** <u>Cancellations and Changes.</u> Buyer may not cancel or modify, including but not limited to movement of delivery dates for the Products, any order for any reason except with Seller's written consent and upon terms that will indemnify, defend and hold Seller harmless against all direct, incidental and consequential loss or damage and any additional expense. Seller, at any time, may change features, specifications, designs and availability of Products.

(Continued on Next Page)



**15.** <u>Assignment.</u> Buyer may not assign its rights or obligations without the prior written consent of Seller.

16. Force Majeure. Seller is not liable for delay or failure to perform any of its obligations by reason of any events or circumstances beyond its reasonable control. Such circumstances include without limitation: accidents, labor disputes or stoppages, government acts or orders, acts of nature, pandemics, epidemics, other widespread illness, or public health emergency, cyber related disruptions, cyber-attacks, ransomware sabotage, delays or failures in delivery from carriers or suppliers, shortages of materials, sudden increases in the price of raw material or components, shutdowns or slowdowns affecting the supply of raw materials or components, or the transportation thereof, oil shortages or oil price increases, energy crisis, energy or fuel interruption, war (whether declared or not) or the serious threat of same, riots, rebellions, acts of terrorism, embargoes, fire or any reason whether similar to the foregoing or otherwise. Seller will resume performance as soon as practicable after the event of force majeure has been removed. All delivery dates affected by an event of force maieure shall be tolled for the duration of such event of force maieure and rescheduled for mutually agreed dates as soon as practicable after the event of force majeure ceases to exist. The right to allocate capacity is in the Seller's sole discretion. An event of force maieure shall not include financial distress. insolvency, bankruptcy, or other similar conditions affecting one of the parties. affiliates and/or subcontractors. An event of force majeure in the meaning of these Terms means any circumstances bevond Seller's control that permanently or temporarily hinders performance, even where that circumstance was already foreseen. Buyer shall not be

entitled to cancel any orders following its claim of an event of force majeure.

**17.** <u>Waiver and Severability</u>. Failure to enforce any provision of these Terms will not invalidate that provision; nor will any such failure prejudice either party's right to enforce that provision in the future. Invalidation of any provision of these Terms shall not invalidate any other provision herein and, the remaining provisions will remain in full force and effect.

**18.** <u>Duration.</u> Unless otherwise stated in the Quote, any agreement governed by or arising from these Terms shall: (a) be for an initial duration of one (1) year; and (b) shall automatically renew for successive one-year terms unless terminated by Buyer with at least 180-days written notice to Seller or if Seller terminates the agreement pursuant to Section 19 of these Terms.

19. Termination. Seller may, without liability to Buyer, terminate any agreement governed by or arising from these Terms for any reason and at any time by giving Buyer thirty (30) days prior written notice. Seller may immediately terminate, in writing, if Buyer: (a) breaches any provision of these Terms, (b) becomes or is deemed insolvent, (c) appoints or has appointed a trustee, receiver or custodian for all or any part of Buyer's property, (d) files a petition for relief in bankruptcy on its own behalf, or one is filed against Buyer by a third party, (e) makes an assignment for the benefit of creditors; or (f) dissolves its business or liquidates all or a majority of its assets.

**20.** <u>Ownership of Rights.</u> Buyer agrees that (a) Seller (and/or its affiliates) owns or is the valid licensee of Seller's IP and (b) the furnishing of information, related documents or other materials by Seller to Buyer does not grant or transfer any ownership interest or license in or to Seller's IP to Buyer, unless expressly agreed in writing. Without limiting the foregoing, Seller retains ownership of all

(Continued on Next Page)

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di (2-ethylhexyl) phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov



Software supplied to Buyer. In no event shall Buyer obtain any greater right in and to the Software than a right in a license limited to the use thereof and subject to compliance with any other terms provided with the Software. Buyer further agrees that it will not, directly or through intermediaries, reverse engineer, decompile, or disassemble any Software (including firmware) comprising or contained within a Product, except and only to the extent that such activity may be expressly permitted, either by applicable law or, in the case of open-source software, the applicable open-source license.

21. Indemnity for Infringement of Intellectual Property Rights. Seller is not liable for infringement of any Intellectual Property Rights except as provided in this Section. 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 a third-party claim that one or more of the Products infringes the Intellectual Property Rights of a third party in the country of delivery of the Products by Seller to Buyer. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of any such claim, and Seller having sole control over the defense of the claim including all negotiations for settlement or compromise. If one or more Products is subject to such a claim, Seller may, at its sole expense and option, procure for Buyer the right to continue using the Products, replace or modify the Products to render them non-infringing, or offer to accept return of the Products and refund the purchase price less a reasonable allowance for depreciation. Seller has no obligation or liability for any claim of infringement: (i) arising from information provided by Buver (including Seller's use of Buyer's Property);

or (ii) directed to any Products for which the designs are specified in whole or part by Buyer; or (iii) resulting from the modification, combination or use in a system of any Products. The foregoing provisions of this Section constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for claims of infringement of Intellectual Property Rights.

**22.** Governing Law. These Terms, the terms of any Quote, and the sale and delivery of all Products are deemed to have taken place in, and shall be governed and construed in accordance with, the laws of the State of Ohio, as applicable to contracts executed and wholly performed therein and without regard to conflicts of laws principles. Buyer irrevocably agrees and consents to the exclusive jurisdiction and venue of the courts of Cuyahoga County, Ohio with respect to any dispute, controversy or claim arising out of or relating to the sale and delivery of the Products.

23. Entire Agreement. These Terms, along with the terms set forth in the Quote, forms the entire agreement between the Buyer and Seller and constitutes the final, complete and exclusive expression of the terms of sale and purchase. In the event of a conflict between any term set forth in the Quote and these Terms, the terms set forth in the Quote shall prevail. All prior or contemporaneous written or oral agreements or negotiations with respect to the subject matter shall have no effect. No modification to these Terms will be binding on Seller unless agreed to in a writing that is signed by an authorized representative of Seller, excluding email correspondence, 'clickwrap' or other purported electronic assent to different or additional terms. Sections 2-25 of these Terms shall survive termination or





cancellation of any agreement governed by or arising from these Terms.

24. No 'Wrap' Agreements/No Authority to Bind. Seller's clicking any buttons or any similar action, such as clicking "I Agree" or "Confirm," to utilize Buyer's software or webpage for the placement of orders, is NOT an agreement to Buyer's Terms and Conditions. NO EMPLOYEE, AGENT OR REPRESENTATIVE OF SELLER HAS THE AUTHORITY TO BIND SELLER BY THE ACT OF CLICKING ANY BUTTON OR SIMILAR ACTION ON BUYER'S WEBSITE OR PORTAL. 25. Compliance with Laws. Buyer

agrees to comply with all applicable laws, regulations, and industry and professional standards, including those of the United States of America, and the country or countries in which Buyer may operate, including without limitation the U.S. Foreign Corrupt Practices Act ("FCPA"), the U.S. Anti-Kickback Act ("Anti-Kickback Act"), U.S. and E.U. export control and sanctions laws ("Export Laws"), the U.S. Food Drug and Cosmetic Act ("FDCA"), and the rules and regulations promulgated by the U.S. Food and Drug Administration ("FDA"), each as currently amended. Buyer agrees to indemnify, defend, and hold harmless Seller from the consequences of any violation of such laws, regulations and standards by Buyer, its employees or agents. Buyer represents that it is familiar with all applicable provisions of the FCPA, the Anti-Kickback Act. Export Laws, the FDCA and the FDA and certifies that Buyer will adhere to the requirements thereof and not take any action that would make Seller violate such requirements. Buyer represents and agrees that Buyer will not make any payment or give anything of value, directly or indirectly, to any governmental official, foreign political party or official thereof, candidate for foreign political office, or commercial entity or person, for any improper purpose, including the purpose of influencing such person to purchase Products or otherwise benefit the business of Seller. Buver further represents and agrees that it will not receive, use, service, transfer or ship any Products from Seller in a manner or for a purpose that violates Export Laws or would cause Seller to be in violation of Export Laws. Buyer agrees to promptly and reliably provide Seller all requested information or documents, including end-user statements and other written assurances, concerning Buyer's ongoing compliance with Export Law.

09/22

WARNING: This product can expose you to chemicals including Lead and Lead Compounds, and Di (2-ethylhexyl) phthalate (DEHP) which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov



## Parker Worldwide

Europe, Middle East, Africa AE – United Arab Emirates, Dubai Tel: +971 4 8127100 parker.me@parker.com

AT - Austria, Wiener Neustadt Tel: +43 (0)2622 23501-0 parker.austria@parker.com

AT - Eastern Europe, Wiener Neustadt Tel: +43 (0)2622 23501 900 parker.easteurope@parker.com

AZ - Azerbaijan, Baku Tel: +994 50 22 33 458 parker.azerbaijan@parker.com

BE/LU – Belgium, Nivelles Tel: +32 (0)67 280 900 parker.belgium@parker.com

BG - Bulgaria, Sofia Tel: +359 2 980 1344 parker.bulgaria@parker.com

BY - Belarus, Minsk Tel: +375 17 209 9399 parker.belarus@parker.com

CH - Switzerland, Etoy Tel: +41 (0)21 821 87 00 parker.switzerland@parker.com

CZ - Czech Republic, Klecany parker.russia@parker.com Tel: +420 284 083 111 parker.czechrepublic@parker.com

DE - Germany, Kaarst Tel: +49 (0)2131 4016 0 parker.germany@parker.com

DK - Denmark, Ballerup Tel: +45 43 56 04 00 parker.denmark@parker.com

ES - Spain, Madrid Tel: +34 902 330 001 parker.spain@parker.com

FI – Finland, Vantaa Tel: +358 (0)20 753 2500 parker.finland@parker.com

FR - France, Contamine s/Arve Tel: +33 (0)4 50 25 80 25 parker.france@parker.com

GR - Greece, Athens Tel: +30 210 933 6450 parker.greece@parker.com

HU - Hungary, Budaoers Tel: +36 23 885 470 parker.hungary@parker.com



IE - Ireland. Dublin Tel: +353 (0)1 466 6370 parker.ireland@parker.com

IT - Italy, Corisico (MI) Tel: +39 02 45 19 21 parker.italy@parker.com

KZ - Kazakhstan, Almatv Tel: +7 7273 561 000 parker.easteurope@parker.com

NL - The Netherlands, Oldenzaal Tel: +31 (0)541 585 000 parker.nl@parker.com

NO - Norway, Asker Tel: +47 66 75 34 00 parker.norway@parker.com

PL - Poland, Warsaw Tel: +48 (0)22 573 24 00 parker.poland@parker.com

PT - Portugal, Leca de Palmeira

Tel: +351 22 999 7360 parker.portugal@parker.com

RO - Romania, Bucharest Tel: +40 21 252 1382 parker.romania@parker.com

RU - Russia, Moscow Tel: +7 495 645-2156

SE - Sweden. Spånga Tel: +46 (0)8 59 79 50 00 parker.sweden@parker.com

SK - Slovakia, Banská Bystrica Tel: +421 484 162 252 parker.slovakia@parker.com

SL - Slovenia, Novo Mesto Tel: +386 7 337 6650 parker.slovenia@parker.com

TR – Turkey, Istanbul Tel: +90 216 4997081 parker.turkey@parker.com

UA - Ukraine, Kiev Tel: +380 44 494 2731 parker.ukraine@parker.com

UK - United Kingdom, Warwick Tel: +44 (0)1926 317 878 parker.uk@parker.com

ZA - South Africa, Kempton Park

Tel: +27 (0)11 961 0700 parker.southafrica@parker.com

#### Parker-Hannifin Corporation

Chelsea Products Division 8225 Hacks Cross Road Olive Branch, MS 38654 United States

Phone: +1 (662) 895 1011 Email: chd support@support.parker.com

www.Parker.com/Chelsea

PN: HY25-1670-M1/US Rev: 05/24

North America

CA – Canada, Milton, Ontario Tel: +1 905 693 3000 MX - Mexico, Toluca Tel: +52 72 2275 4200 Asia Pacific AU – Australia, Castle Hill Tel: +61 (0)2-9634 7777 CN - China, Shanghai Tel: +86 21 2899 5000 HK – Hong Kong Tel: +852 2428 8008 IN – India, Mumbai

Tel: +91 22 6513 7081-85

JP - Japan. Fujisawa Tel: +81 (0)4 6635 3050

KR - South Korea, Seoul Tel: +82 2 559 0400

MY - Malaysia, Shah Alam Tel: +60 3 7849 0800

NZ - New Zealand, Mt Wellington Tel: +64 9 574 1744

SG - Singapore Tel: +65 6887 6300

TH - Thailand, Bangkok Tel: +662 717 8140

TW – Taiwan, New Taipei City Tel: +886 2 2298 8987

South America

AR – Argentina, Buenos Aires Tel: +54 3327 44 4129 BR - Brazil. Cachoeirinha RS Tel: +55 51 3470 9144

CL - Chile, Santiago Tel: +56 2 623 1216

Pan Am, Miami Tel: +1 305-470-8800