



GILDEMEISTER

**GM 16** AC Hirt



**GILDEMEISTER**

**Wickman**



**MORI-SAY**

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## **“La scelta ideale per il vostro plurimandrino”**

L'azienda viene fondata nel 1972 come “Turlo&Delvecchio Srl” in Borgosesia (VC) e nel giro di pochi anni si specializza nella produzione di apparecchiature e di pezzi di ricambio per torni automatici. Dopo essersi trasferita nella sua attuale sede, nel 2019 l'azienda acquisisce la società “Dienne Sas”, specializzata nella revisione e manutenzione di torni automatici, la cui opera viene proseguita dalla Dienne-Turlo Srl, nuova azienda del gruppo, sia nella sede di Varallo (VC), sia nella nuova sede di Filago (BG).

Oggi, rappresentiamo la miglior scelta per il supporto tecnico ai plurimandrini delle migliori marche mondiali: Gildemeister, Tornos, Wickman, Schutte, etc. La gamma di prodotti e servizi che siamo in grado di offrire è tra le più ampie del mercato: fornitura di ricambi standard o personalizzabili, apparecchiature per le lavorazioni meccaniche, pinze, camme, interventi di manutenzione on site e diversi livelli di revisione macchina, che eseguiamo presso le nostre sedi.

*The company was founded in 1972 as “Turlo&Delvecchio Srl” in Borgosesia (VC) and within a few years it specialized in the production of equipments and spare parts for automatic lathes. After having moved to its current location, in 2019 the company acquired the company “Dienne Sas”, specialized in the revision and maintenance of automatic lathes; the business of “Dienne Sas” is continued by Dienne-Turlo Srl, a new company of the group, in both the headquarters at Varallo (VC) and in the new premises in Filago (BG).*

*Today, we are the best choice for the technical support to multi-spindles lathes manufactured by the most famous brands in the world: Gildemeister, Tornos, Wickman, Schutte, etc. The range of products and services we can offer is among the widest in the market: supply of standard or customizable spare parts, mechanical processing equipment, collets, cams, on-site maintenance and different levels of machine overhaul, which we carry out at our premises.*



## **“Produzione interna sinonimo di know-how, qualità e flessibilità”**

La produzione interna all’azienda ci ha permesso di distinguerci dalla concorrenza a livello di sviluppo tecnologico, qualitativo e di flessibilità produttiva, offrendo soluzioni standard o personalizzate e tempi di consegna contenuti. Possiamo contare, infatti, su un fornito magazzino di materie prime, un reparto di tornitura, uno di fresatura e uno di rettifica, con un parco macchine all’avanguardia e personale altamente qualificato.

Abbiamo posto particolare attenzione sulla qualità del prodotto, garantita da continue verifiche nel corso della produzione e da un laboratorio che esegue i controlli finali su ogni singolo lotto, analizzando il rispetto delle tolleranze e la bontà dei trattamenti termici.

I nostri prodotti sono disponibili per i nostri clienti nei magazzini di Varallo Sesia (VC) e di Filago (BG).

*The production inside the company has allowed us to distinguish between competition in terms of technological development, quality and production flexibility, offering standard or customized solutions and low delivery times. In fact, we can count on a well stocked warehouse of raw materials, turning, milling and grinding departments, with a cutting-edge machinery and highly qualified personnel.*

*We pay particular attention to the quality of the products, guaranteed by continuous checks during the production and by a laboratory that performs final checks on each individual batch, analyzing the respect of tolerances and the goodness of thermal treatments.*

*Our products are available for our customers in the warehouses at Varallo Sesia (VC) and at Filago (BG).*

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**RICAMBI MACCHINA**  
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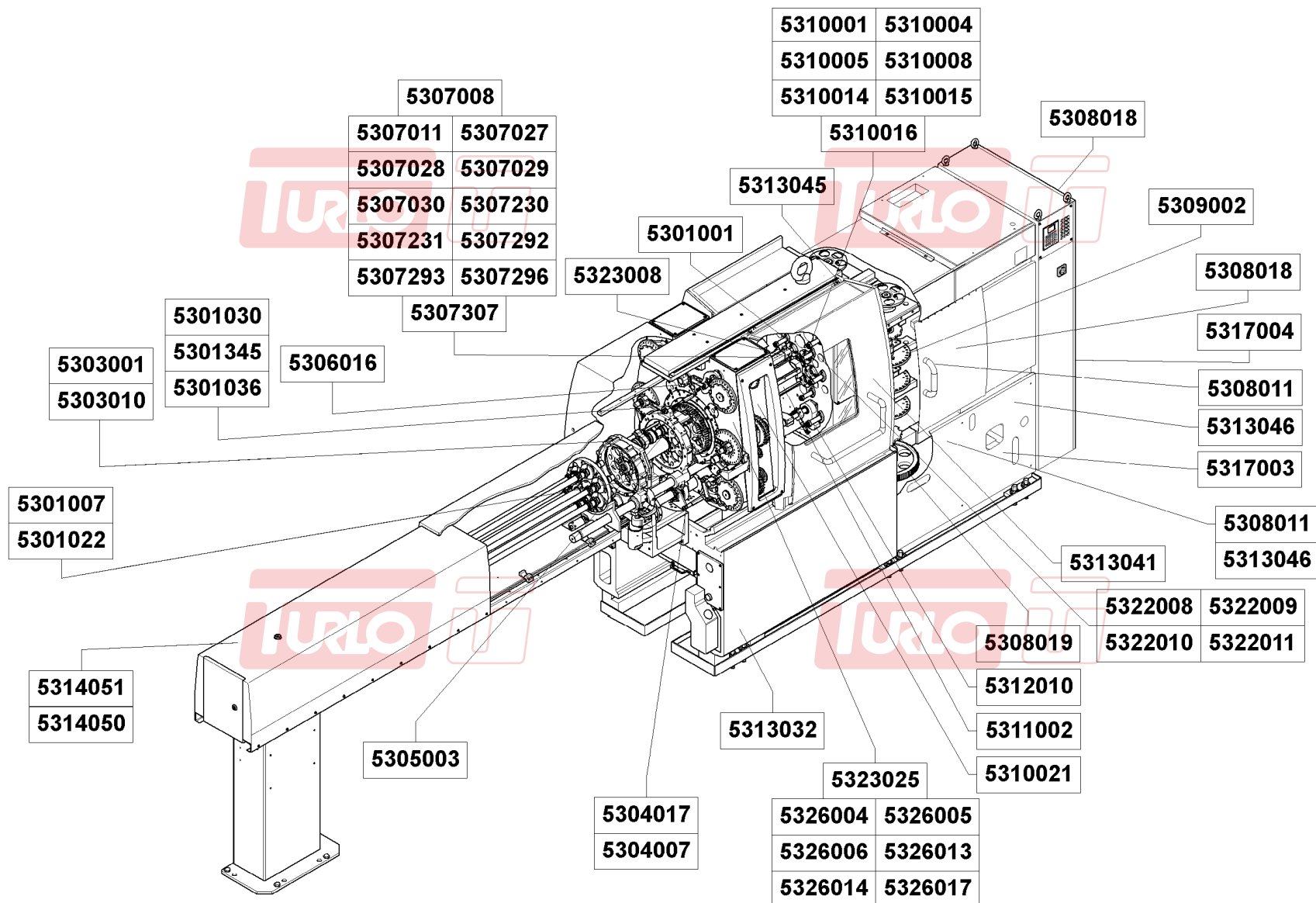


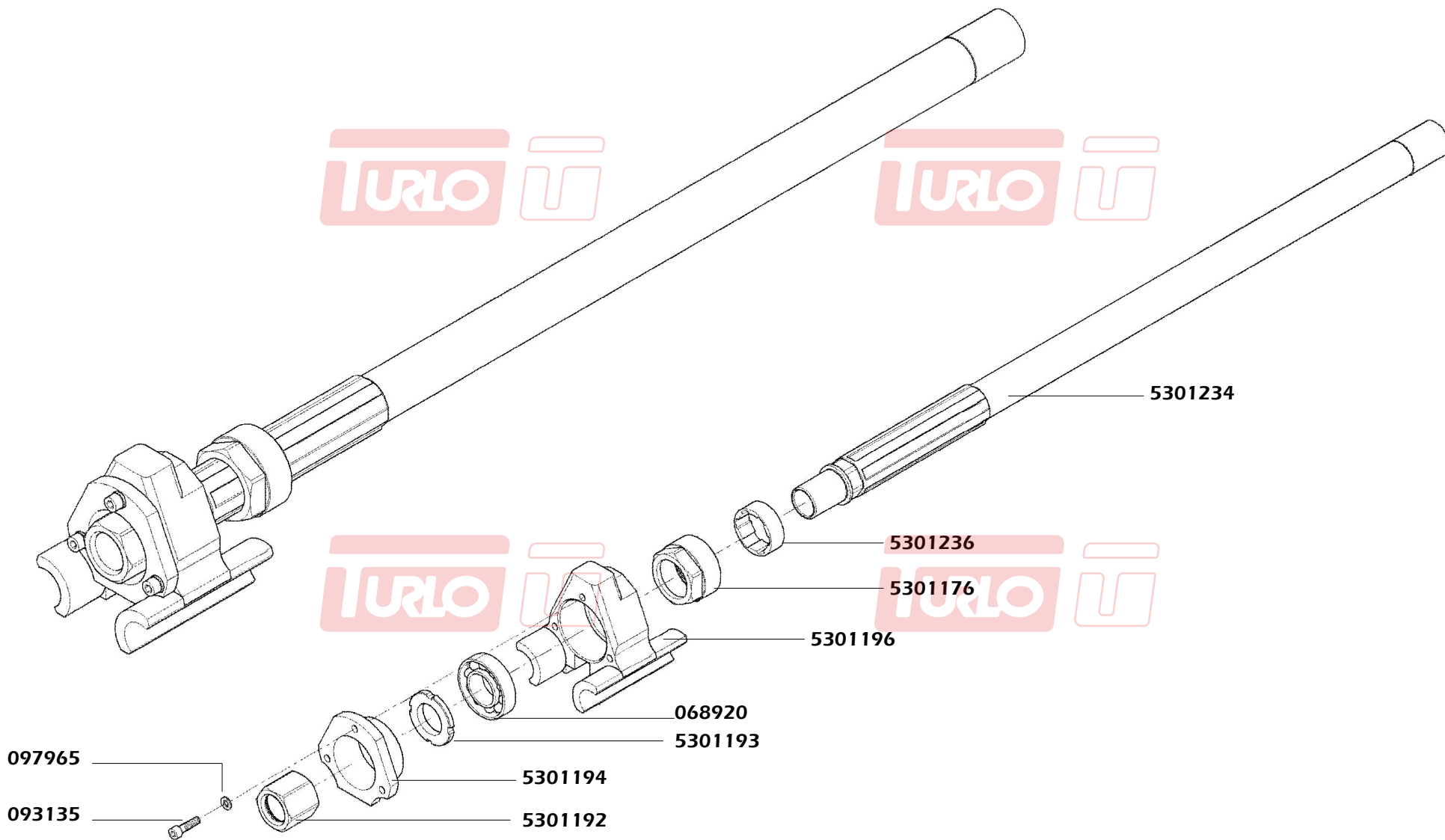
**Ricambi macchina**  
*Machine parts*

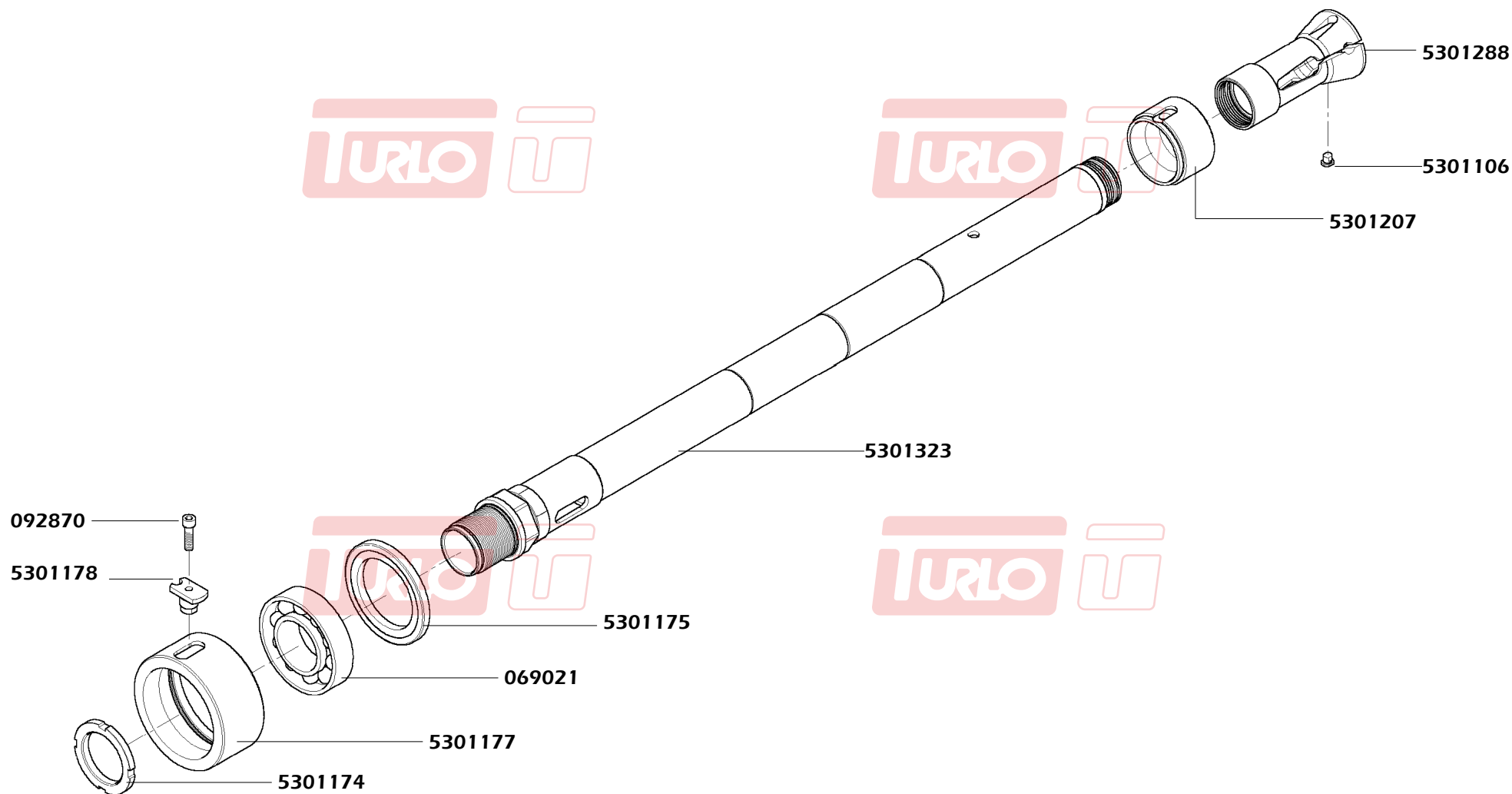


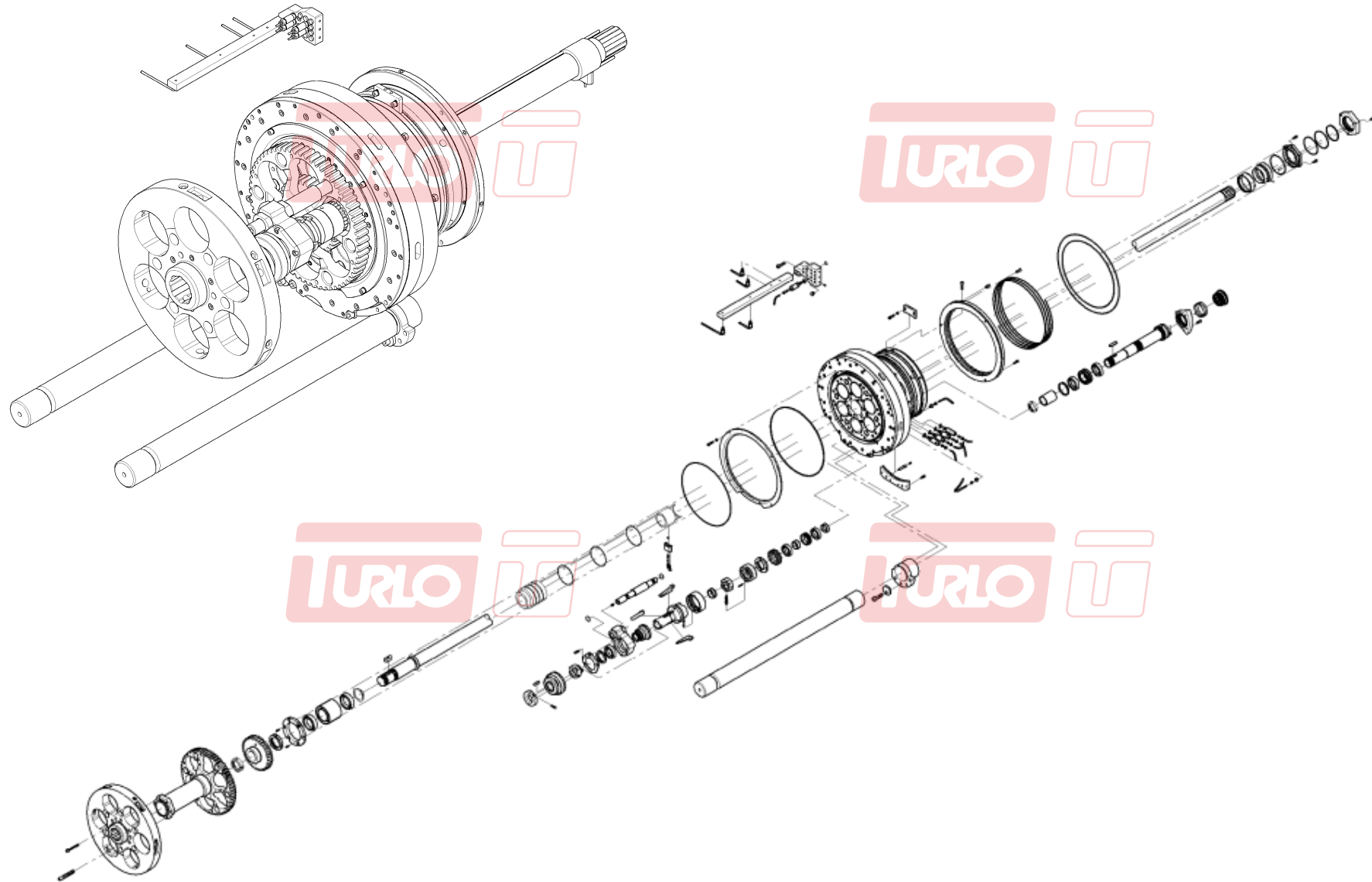
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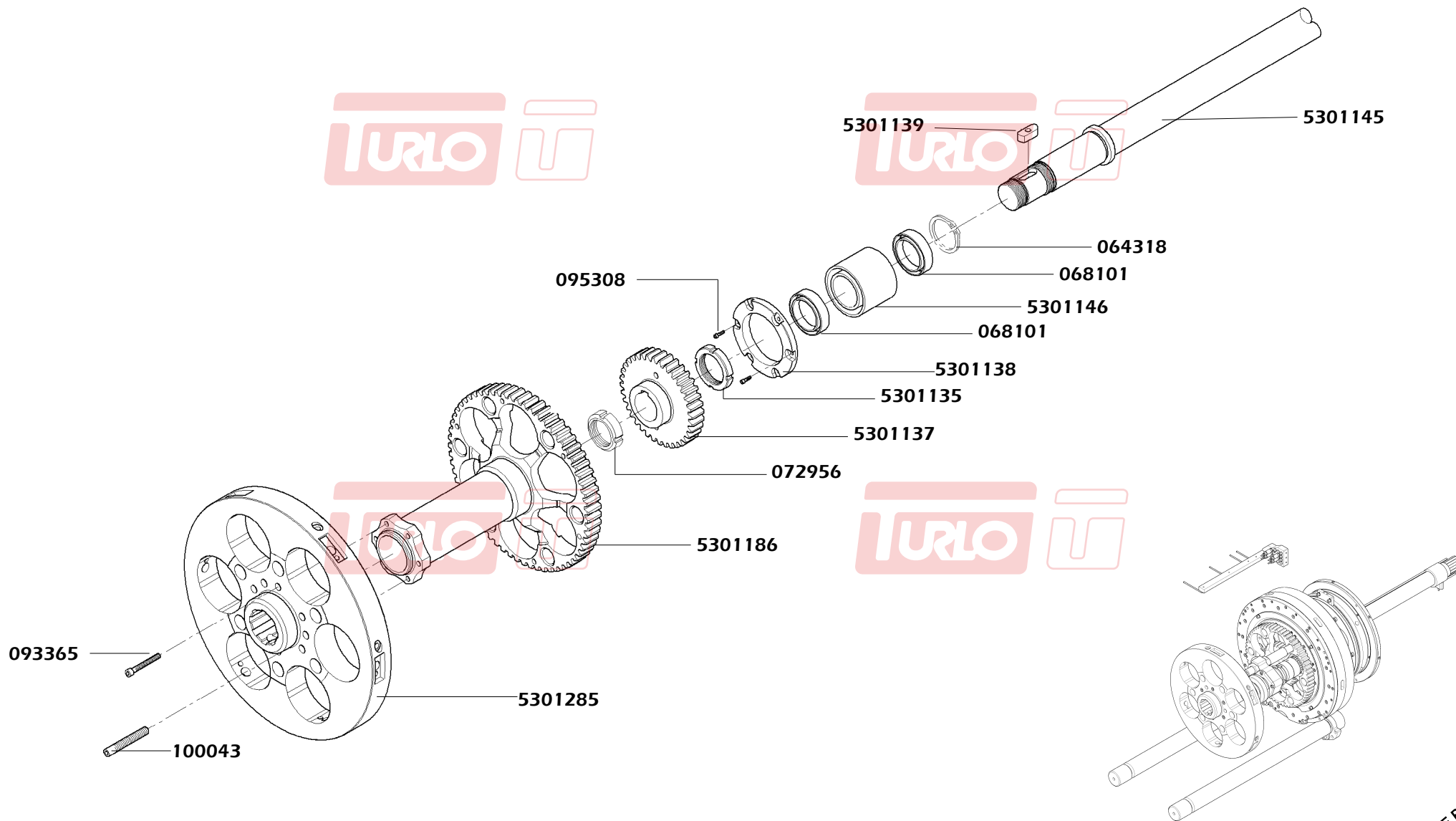
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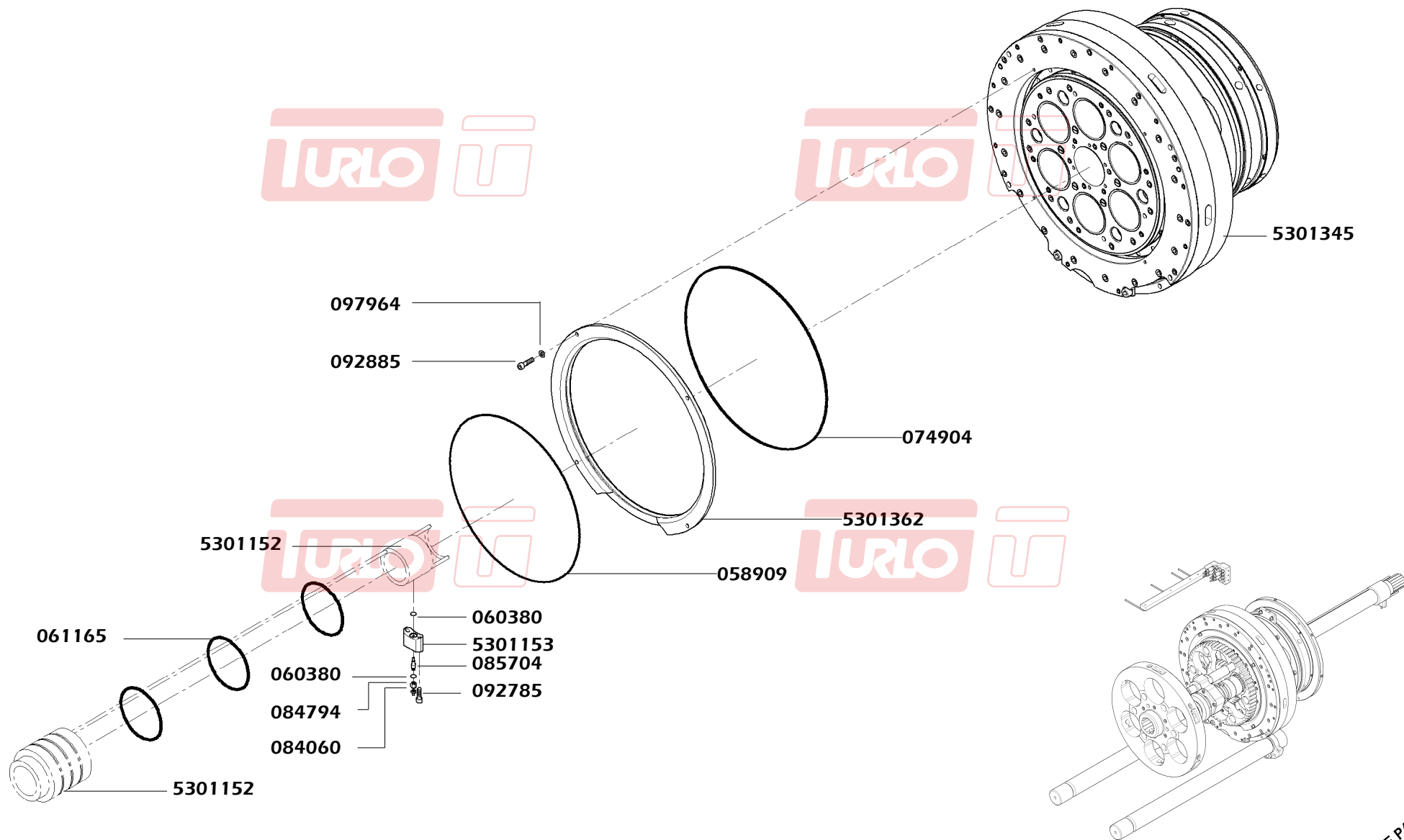




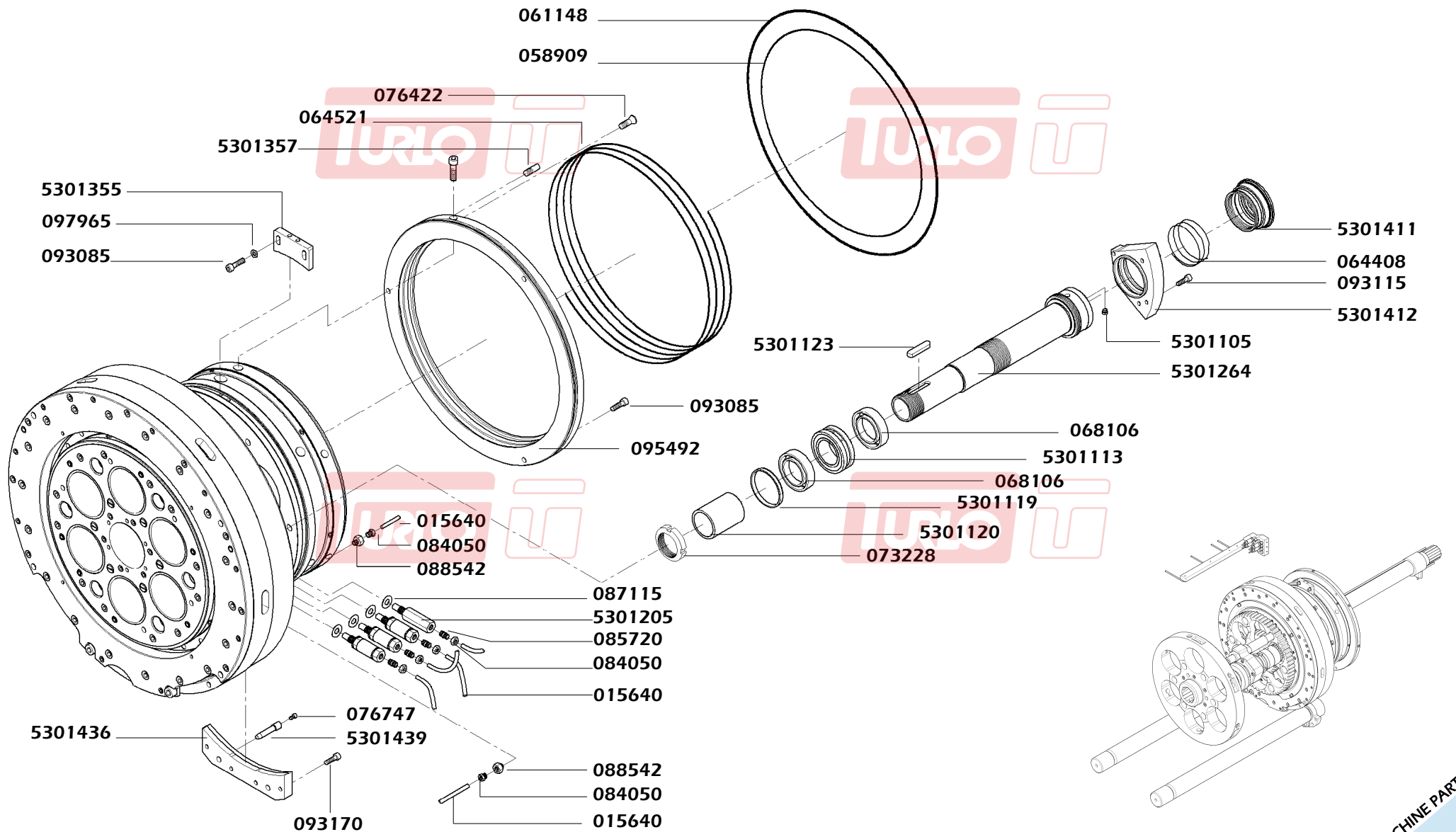


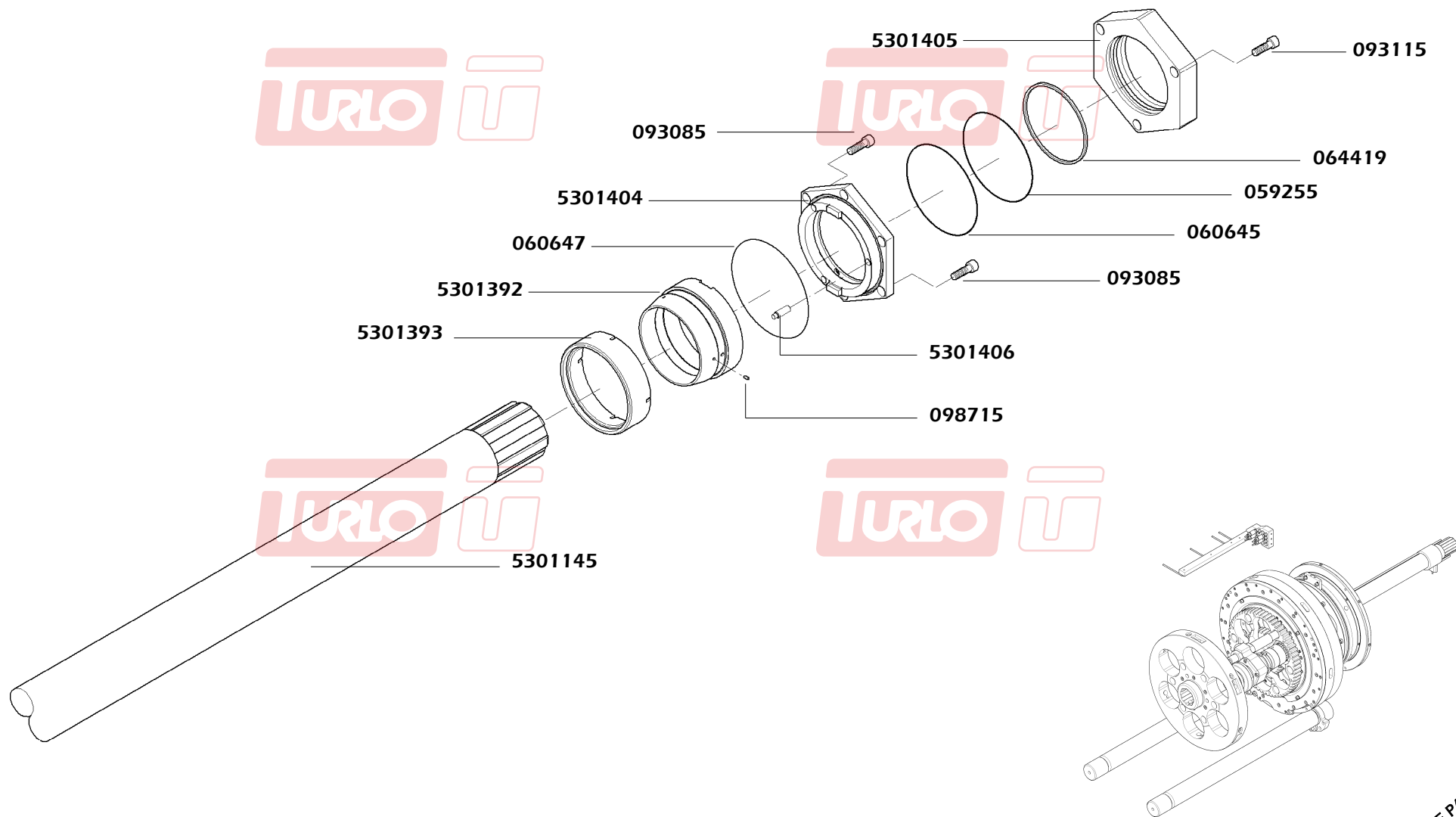


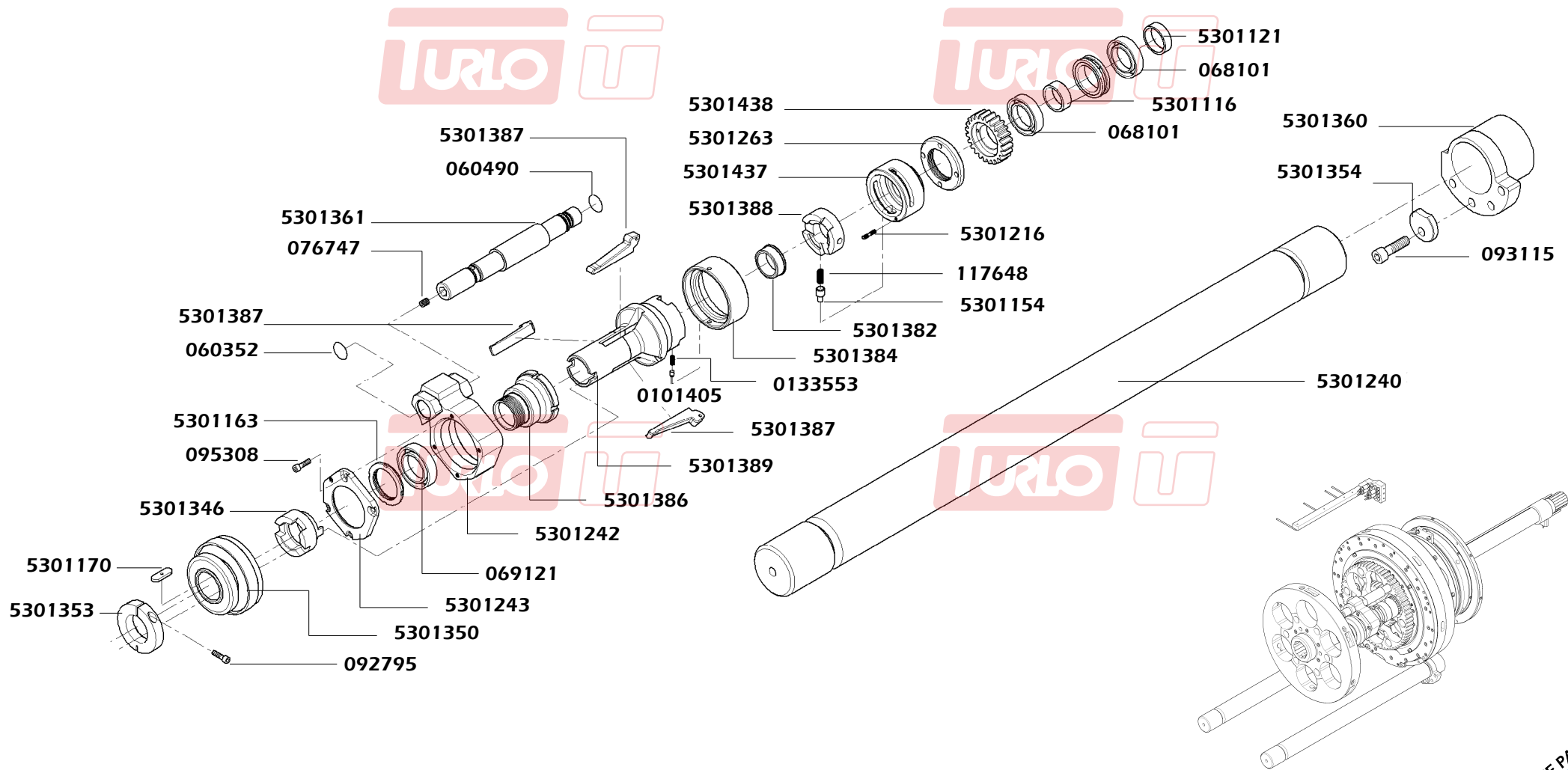


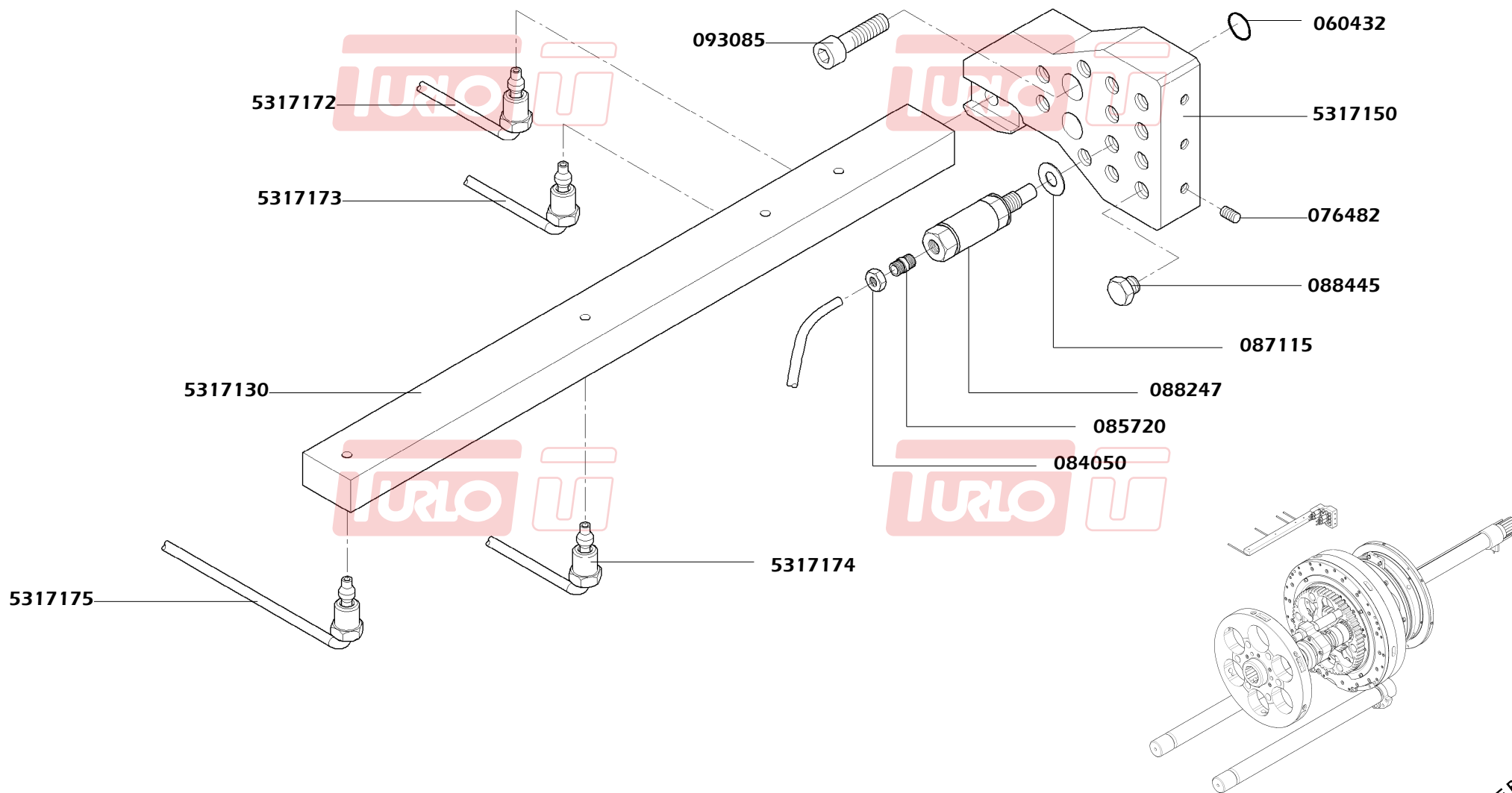


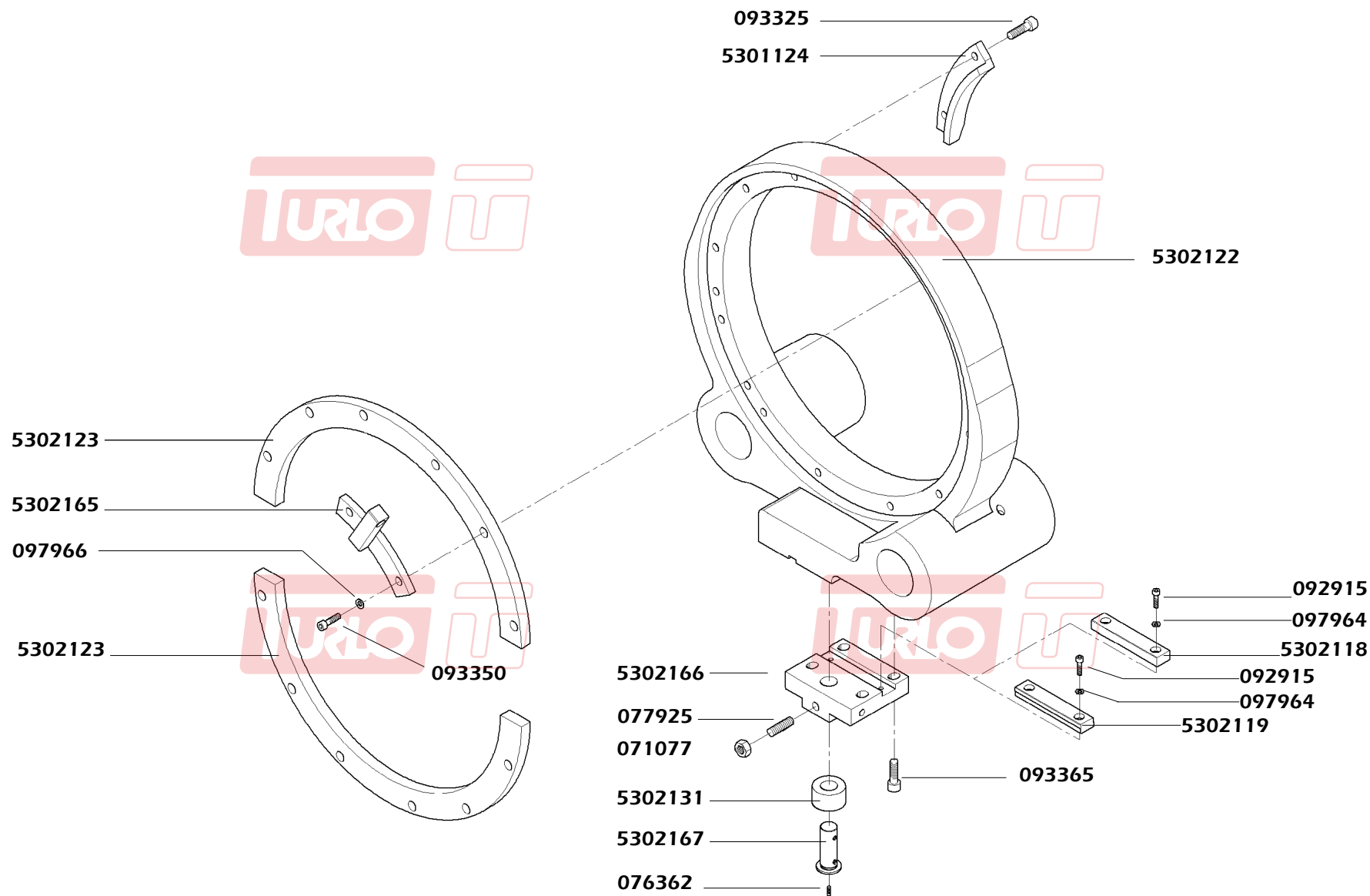


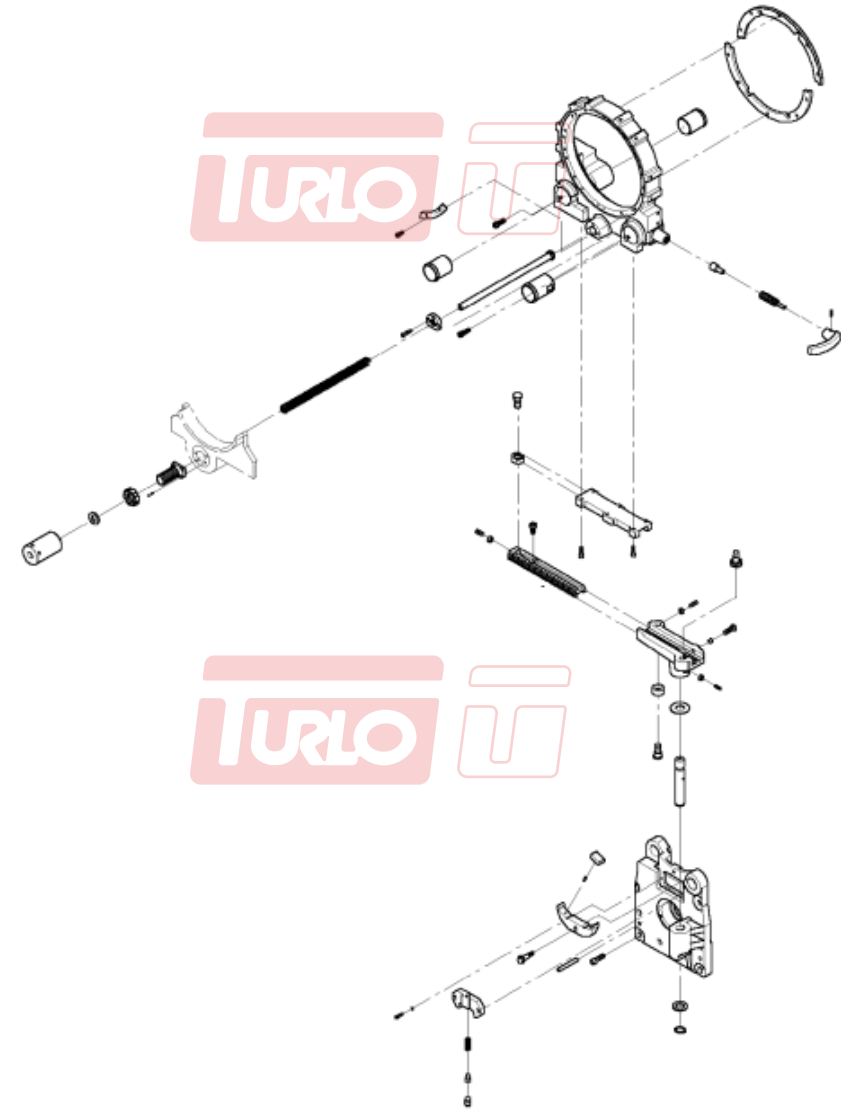
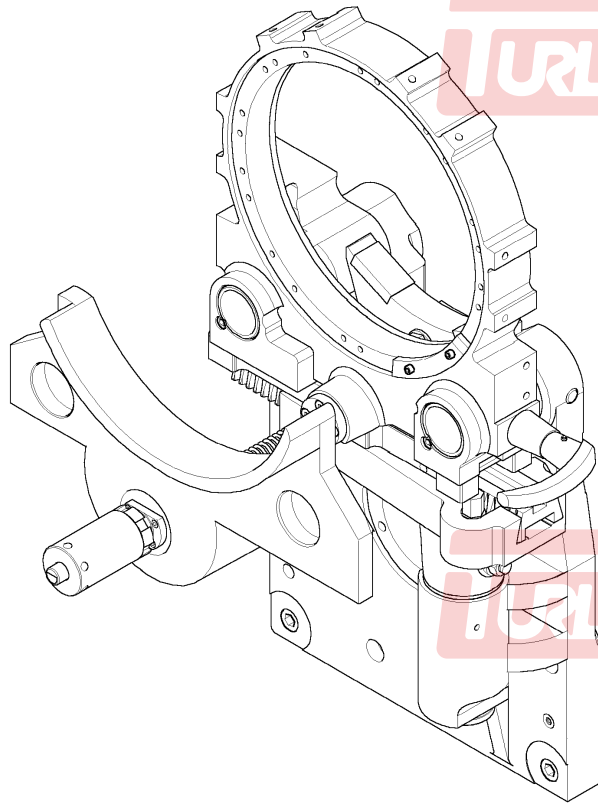


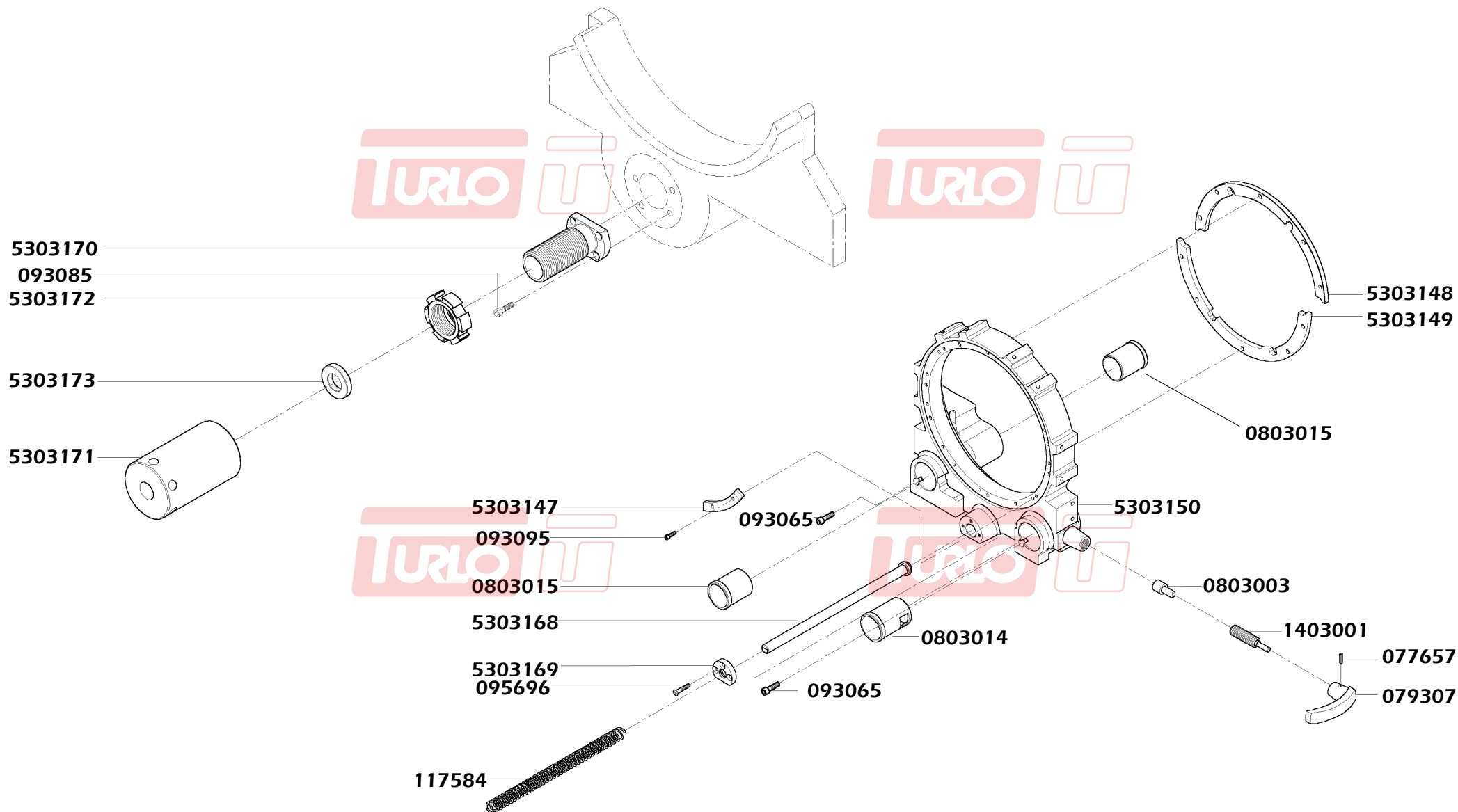


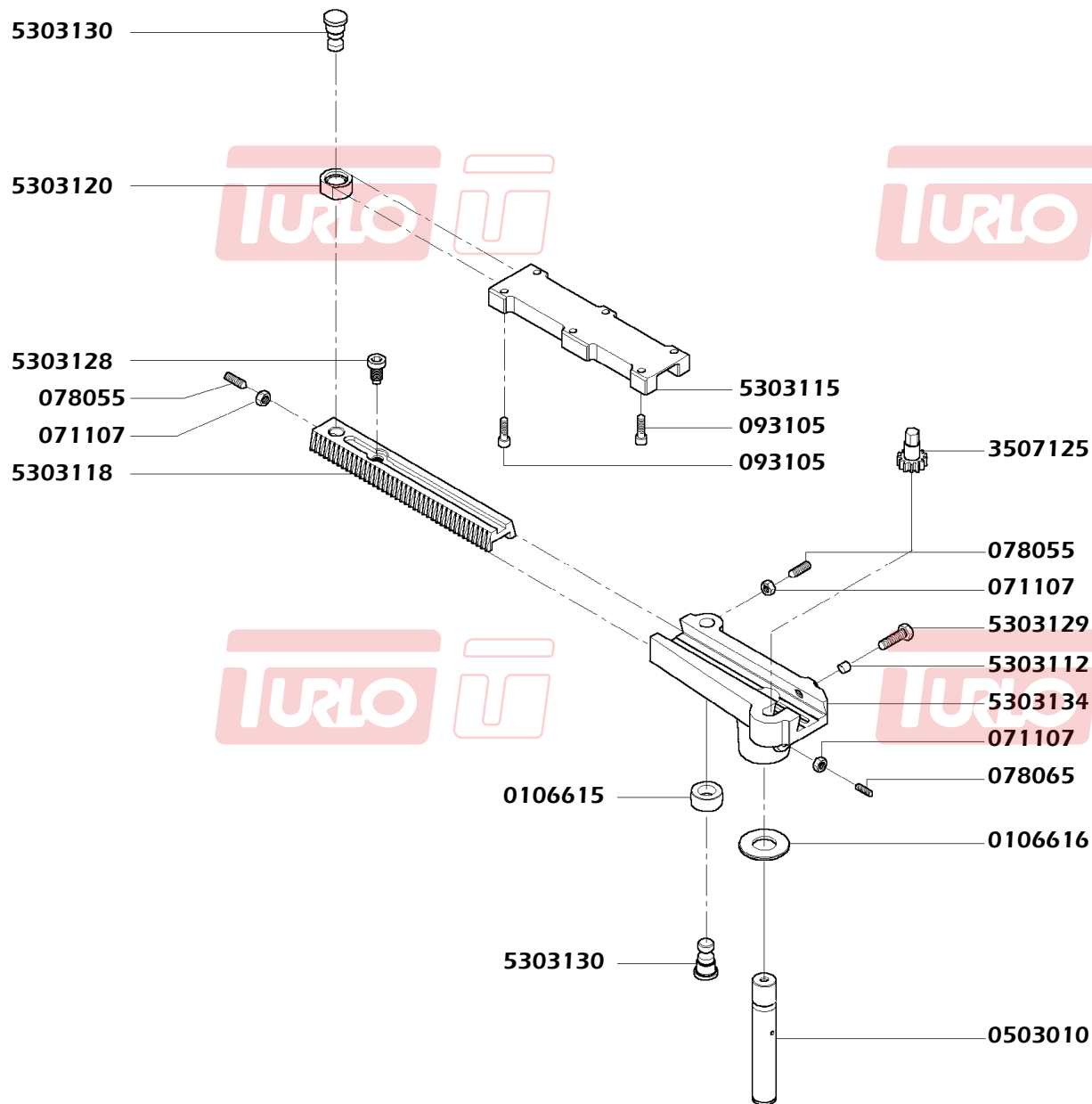




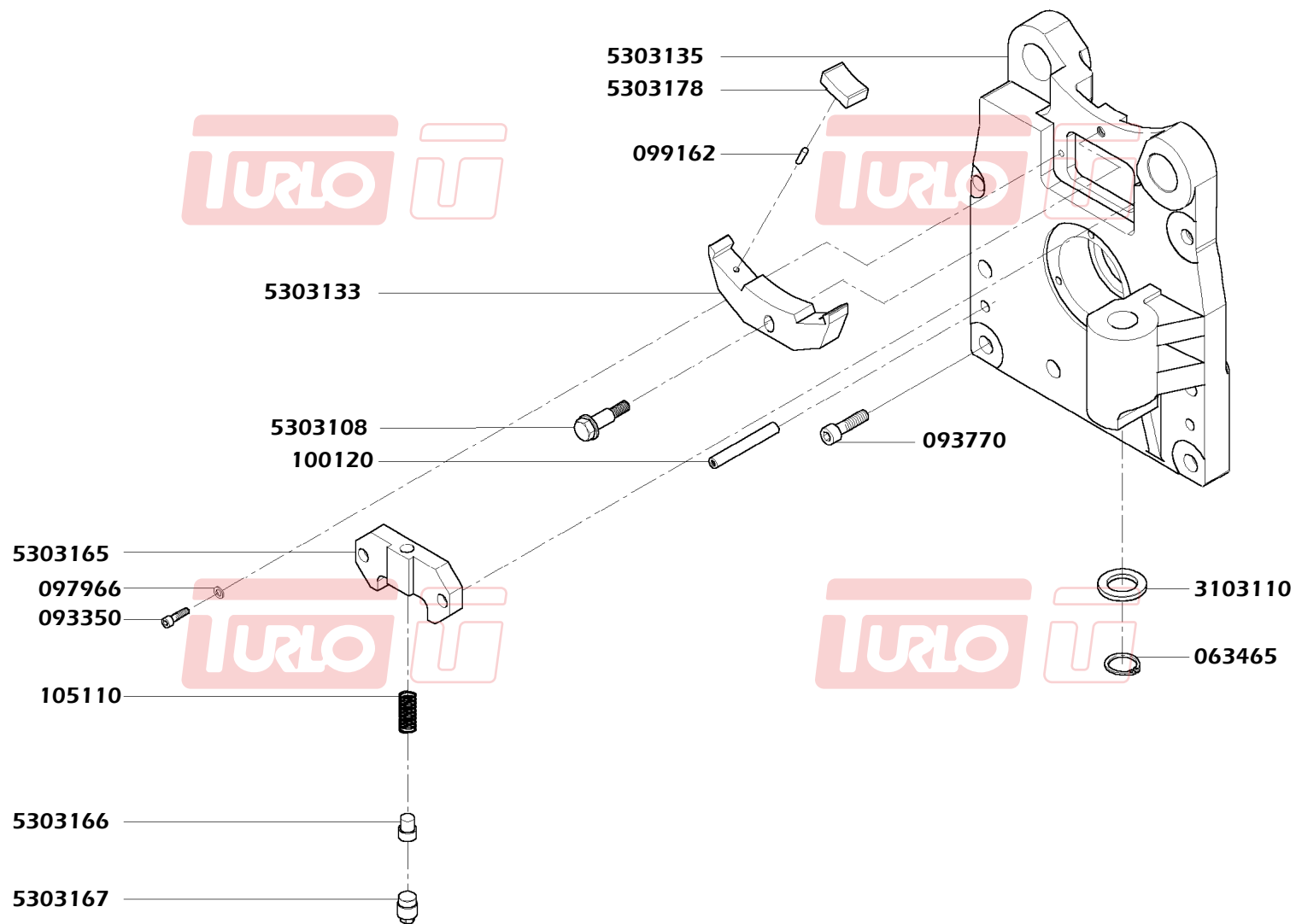


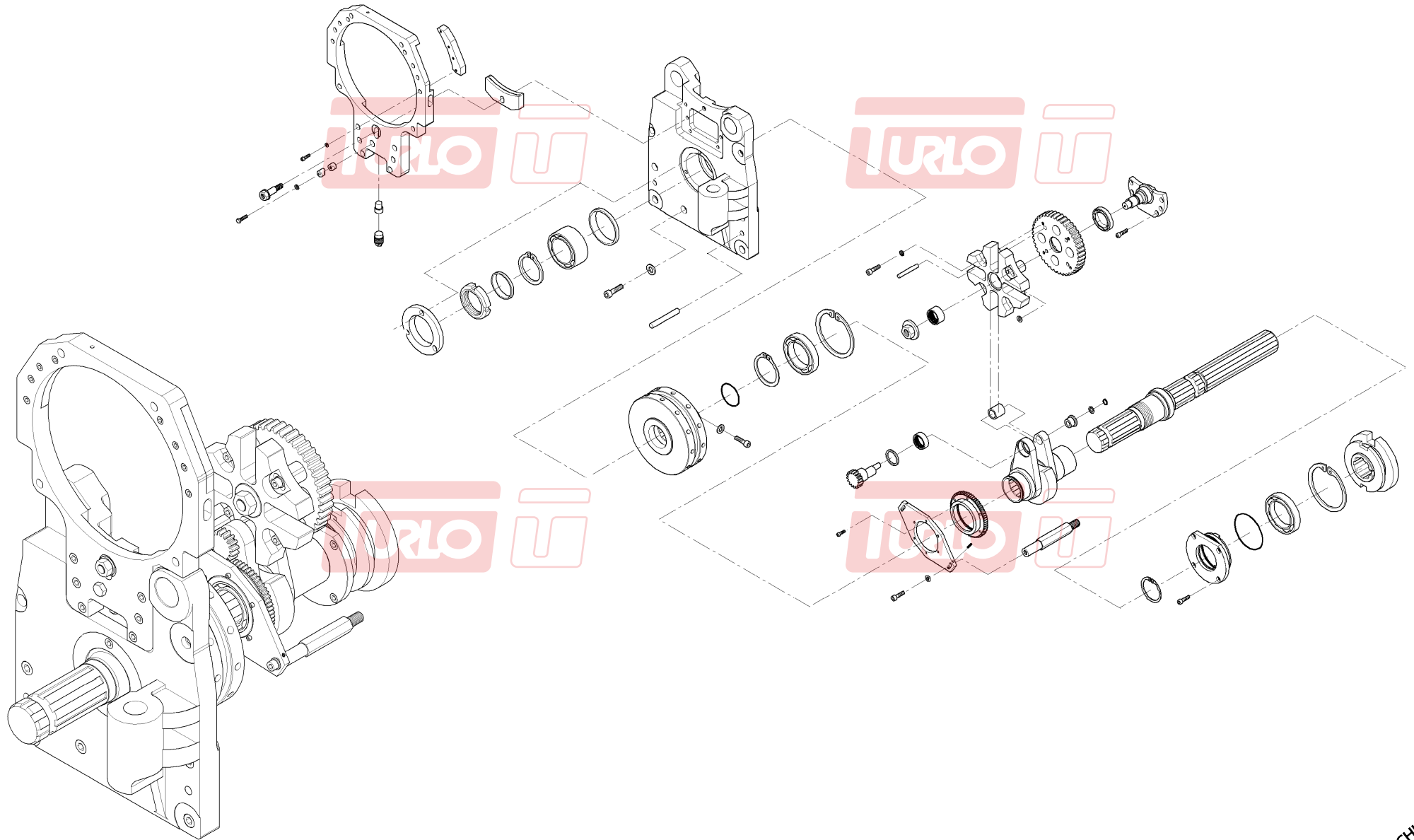


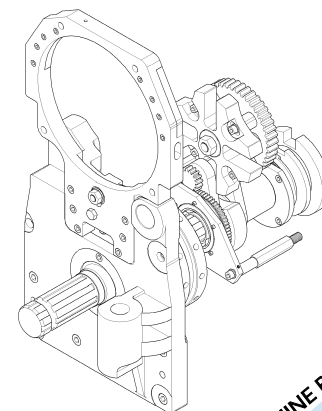
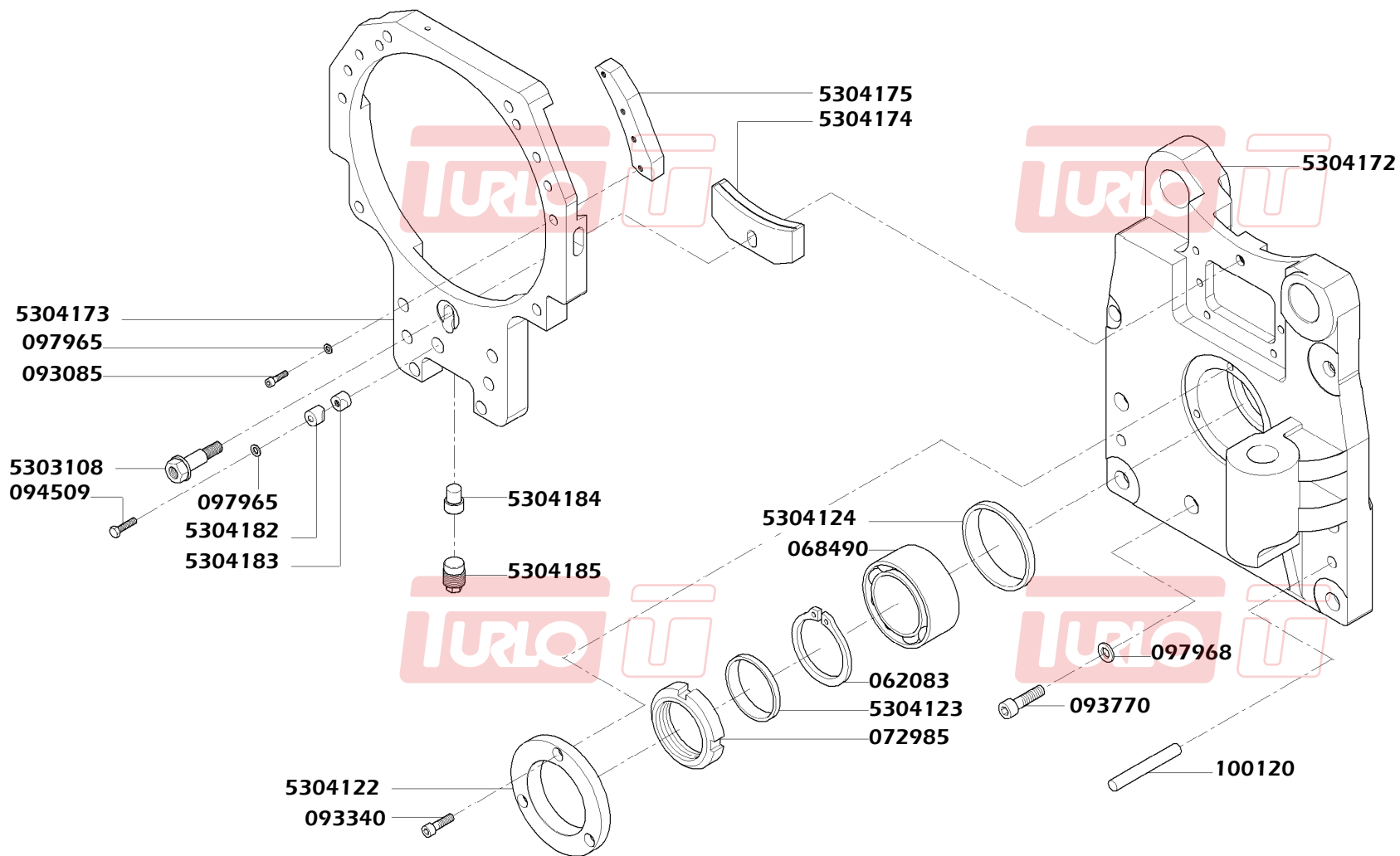


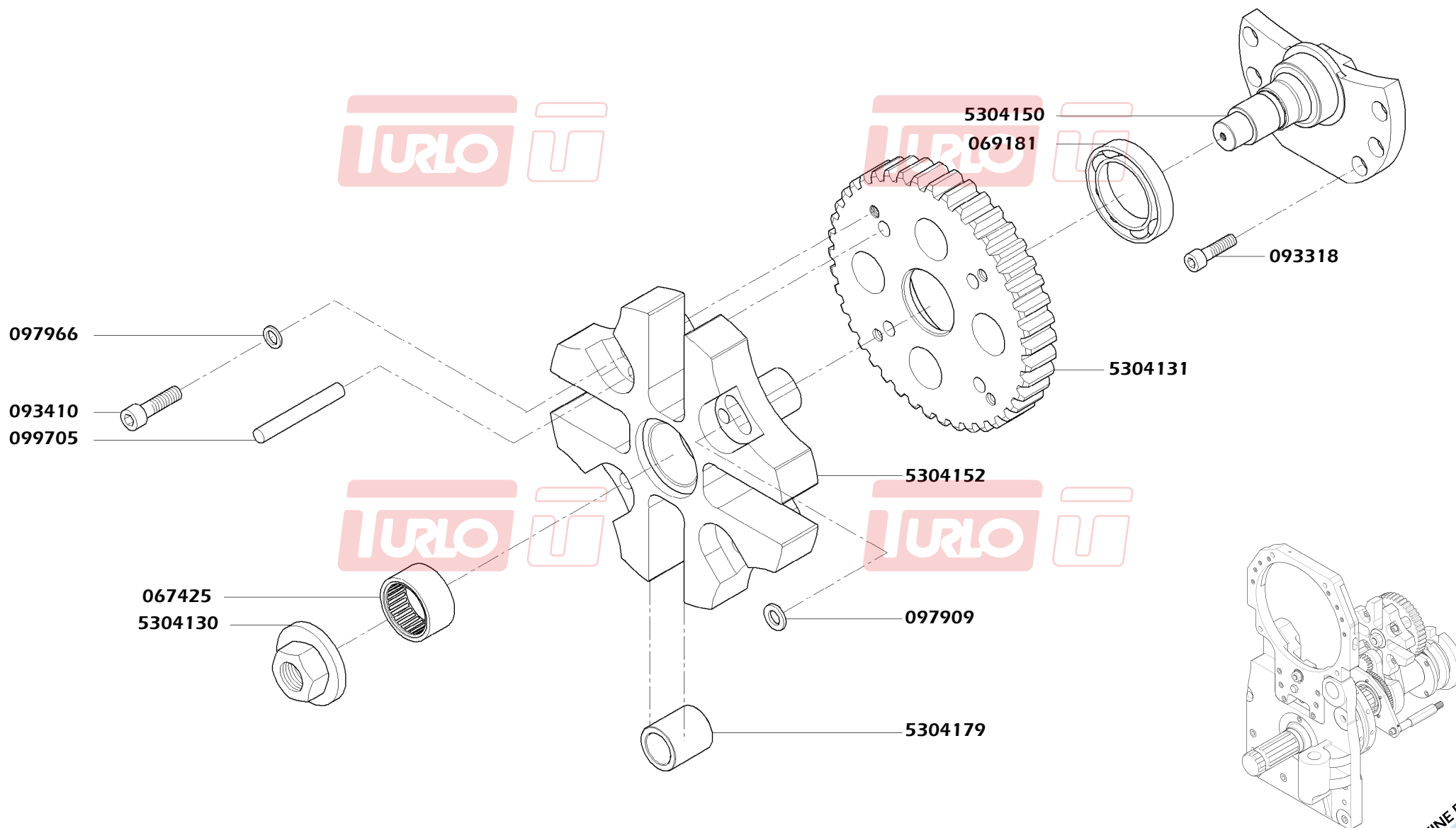


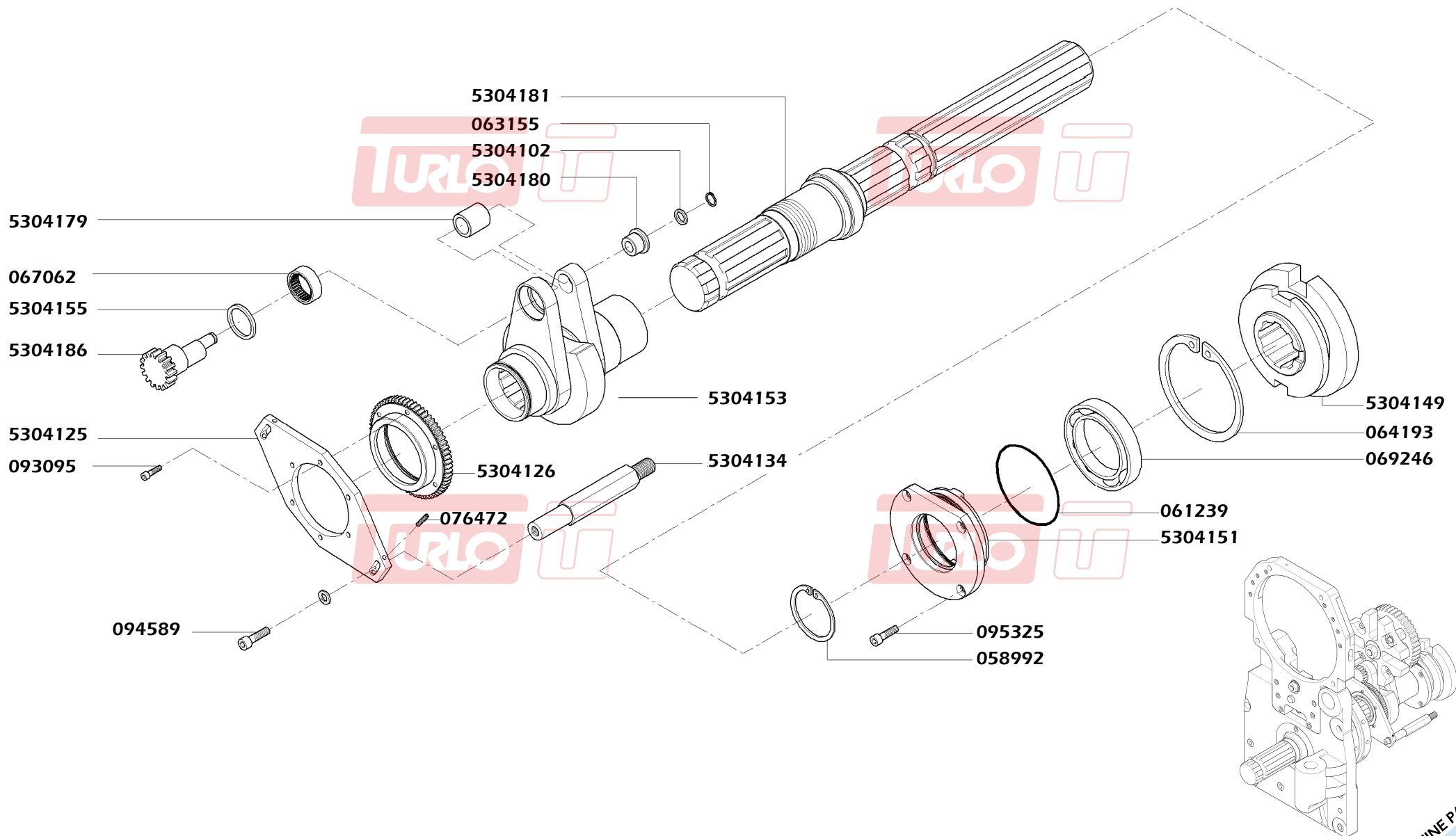


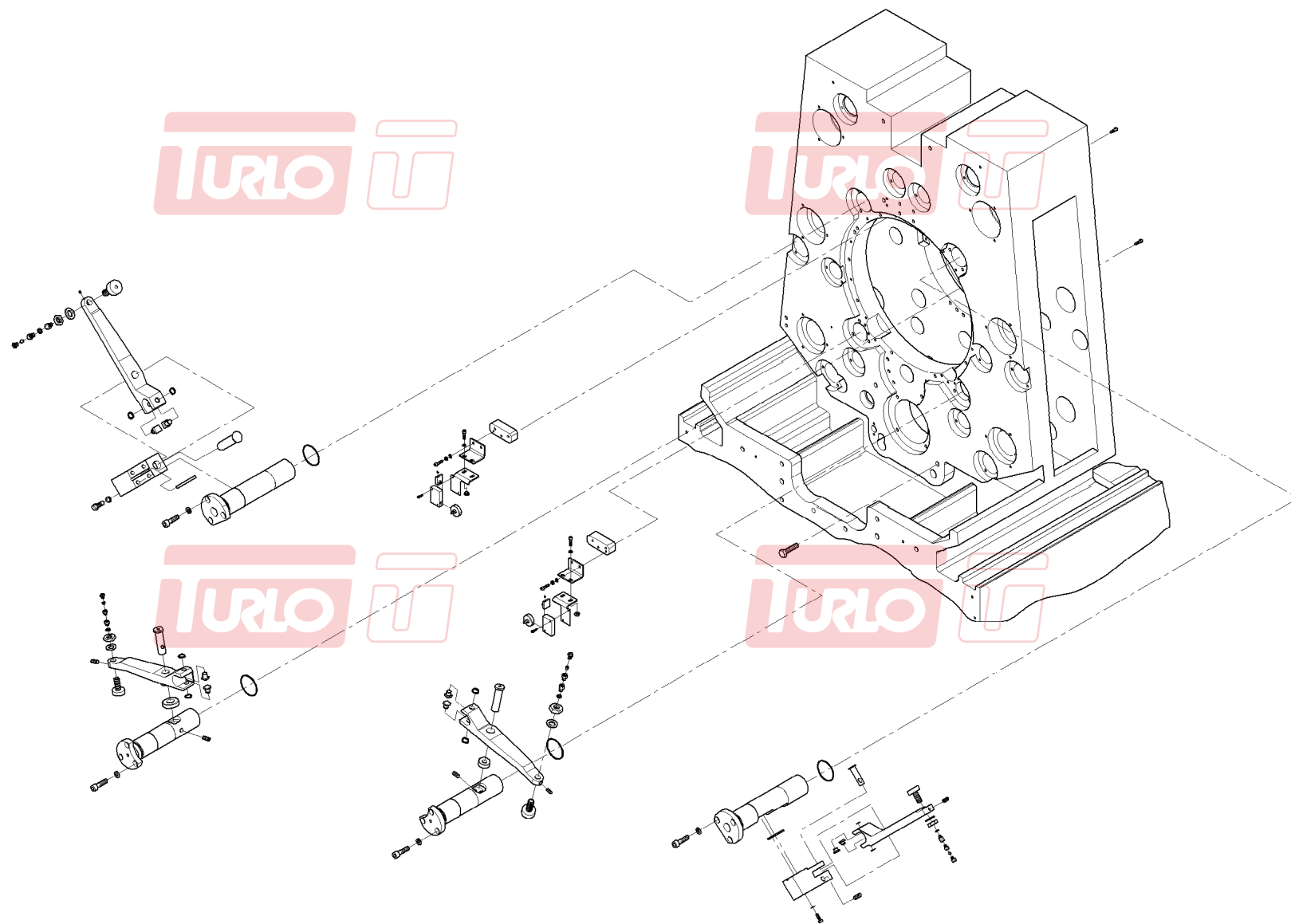


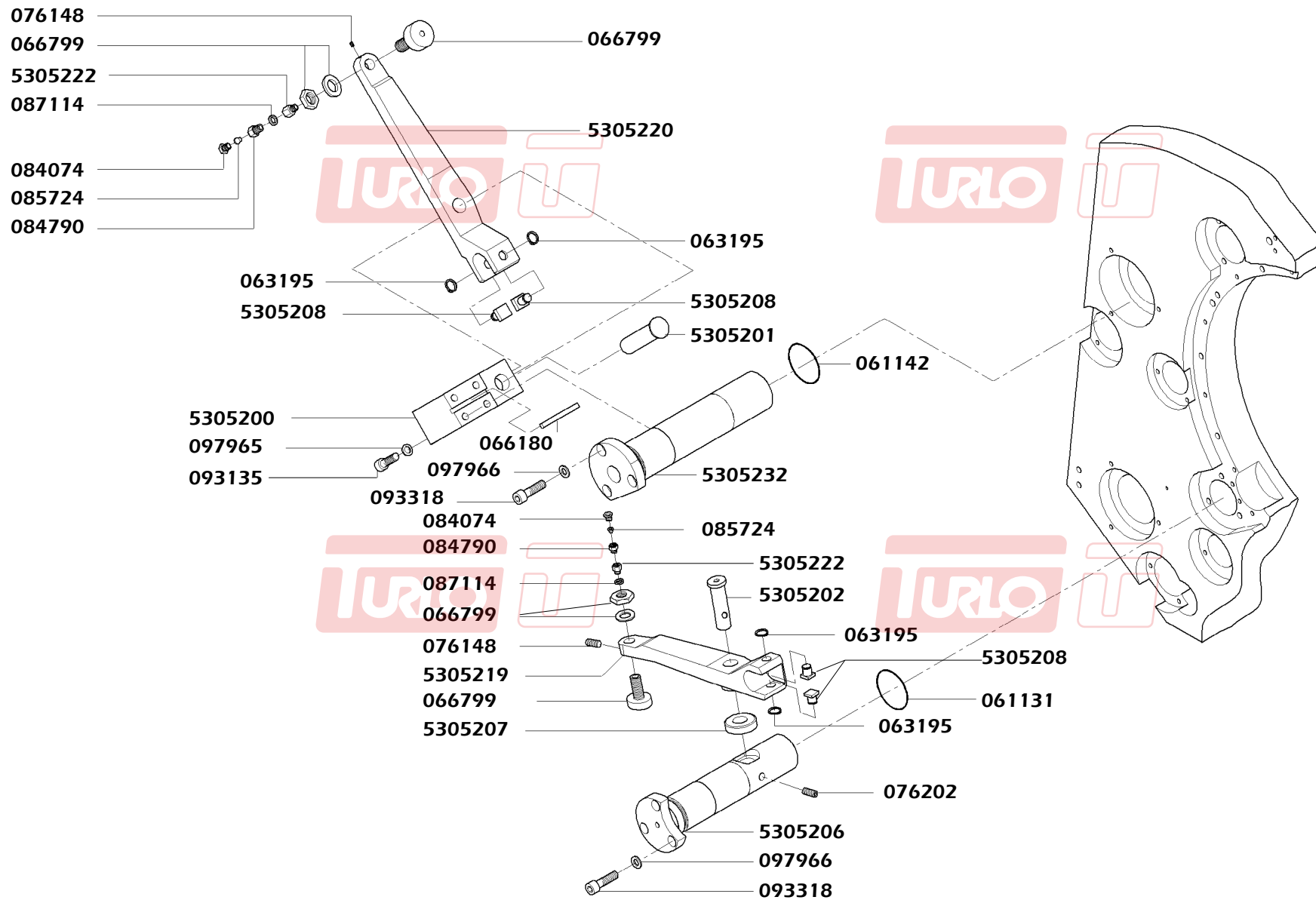


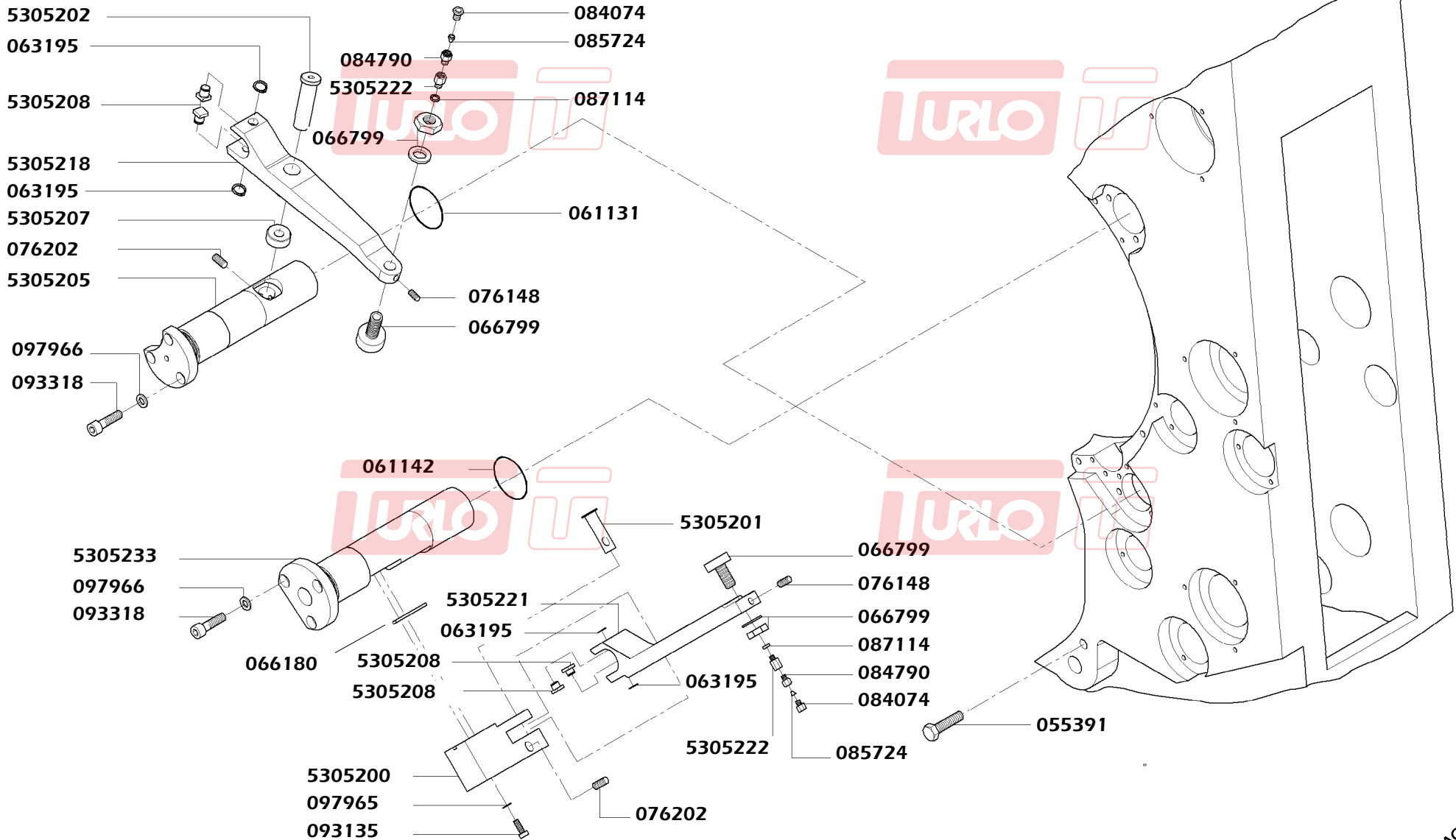




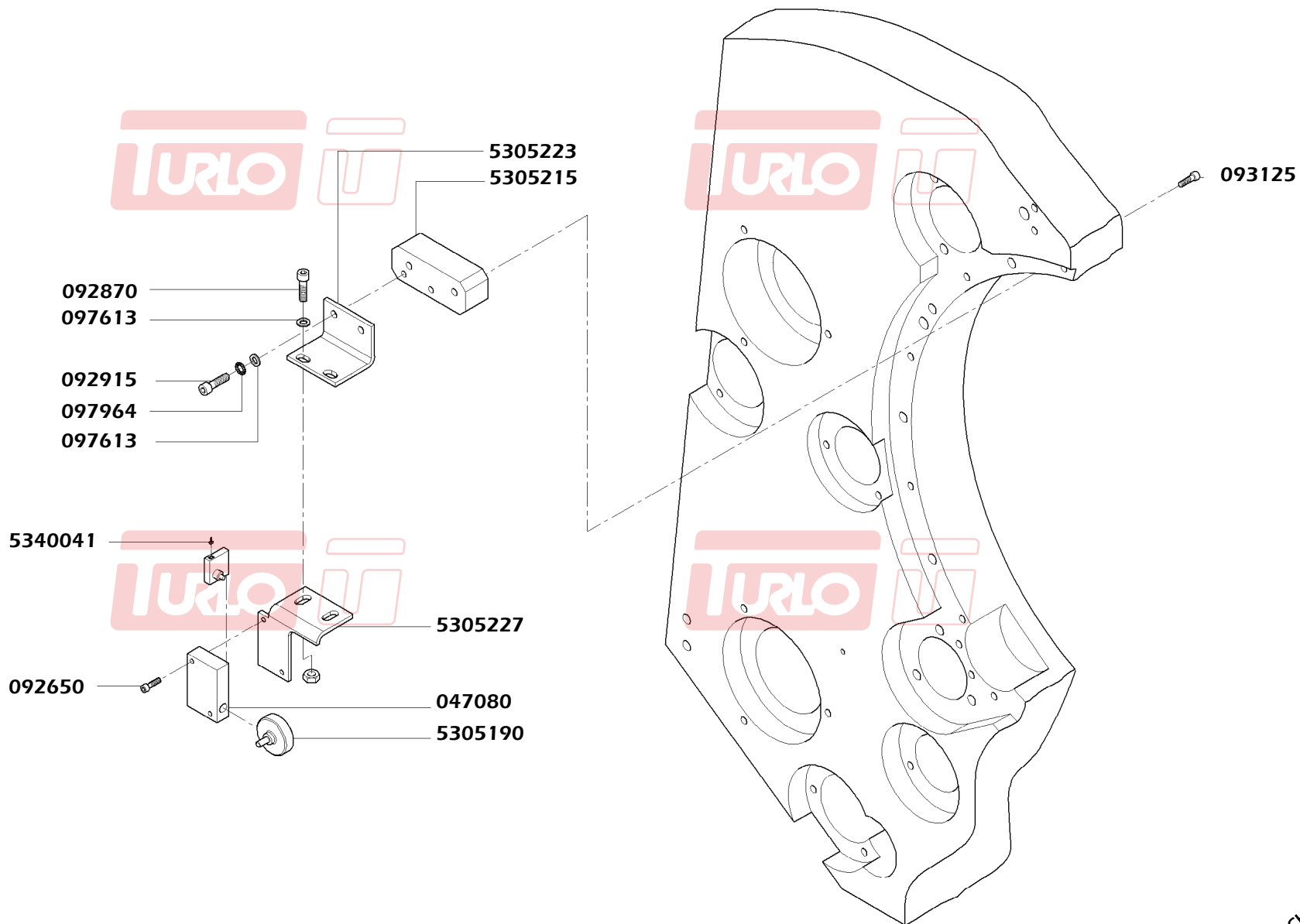


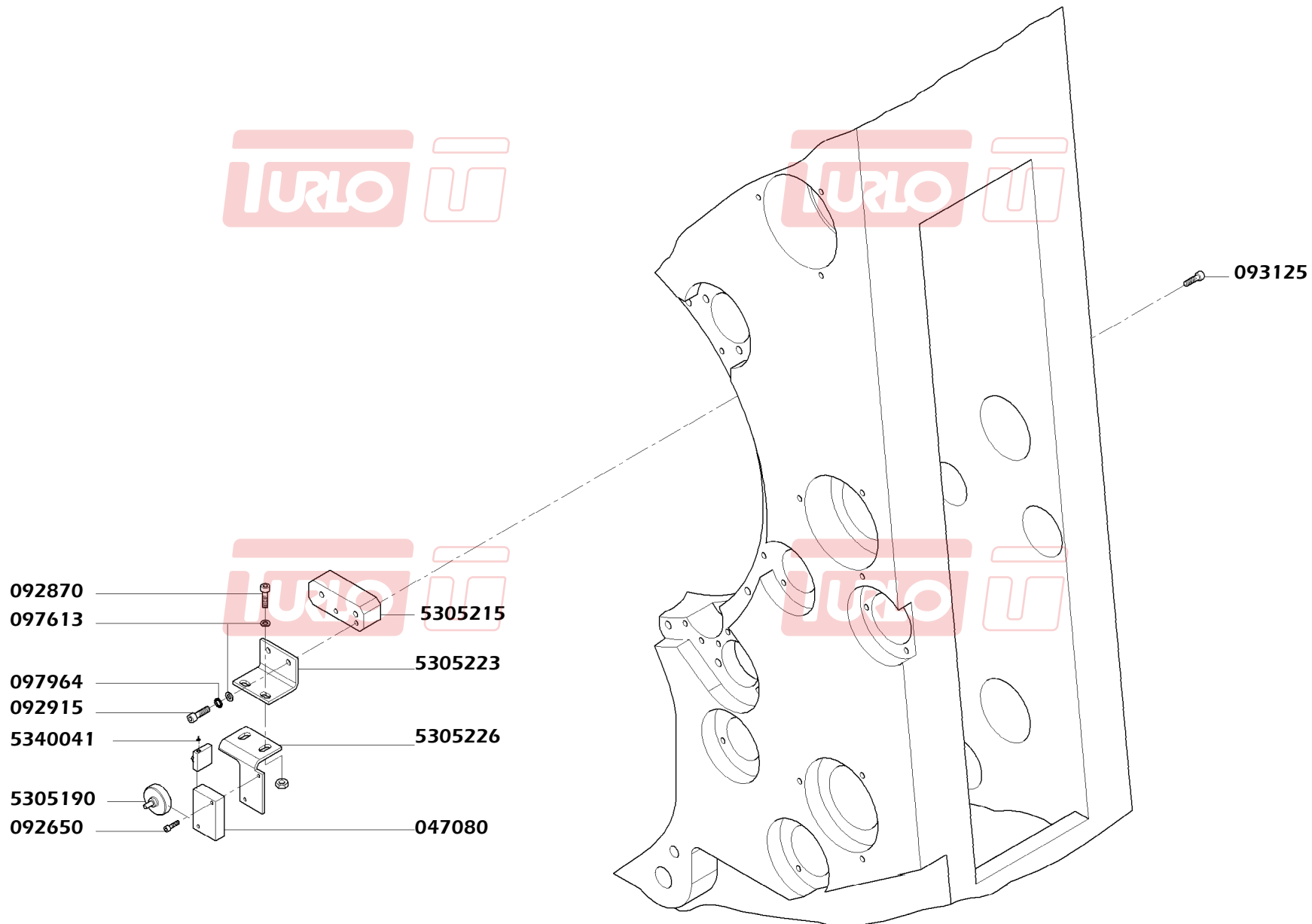








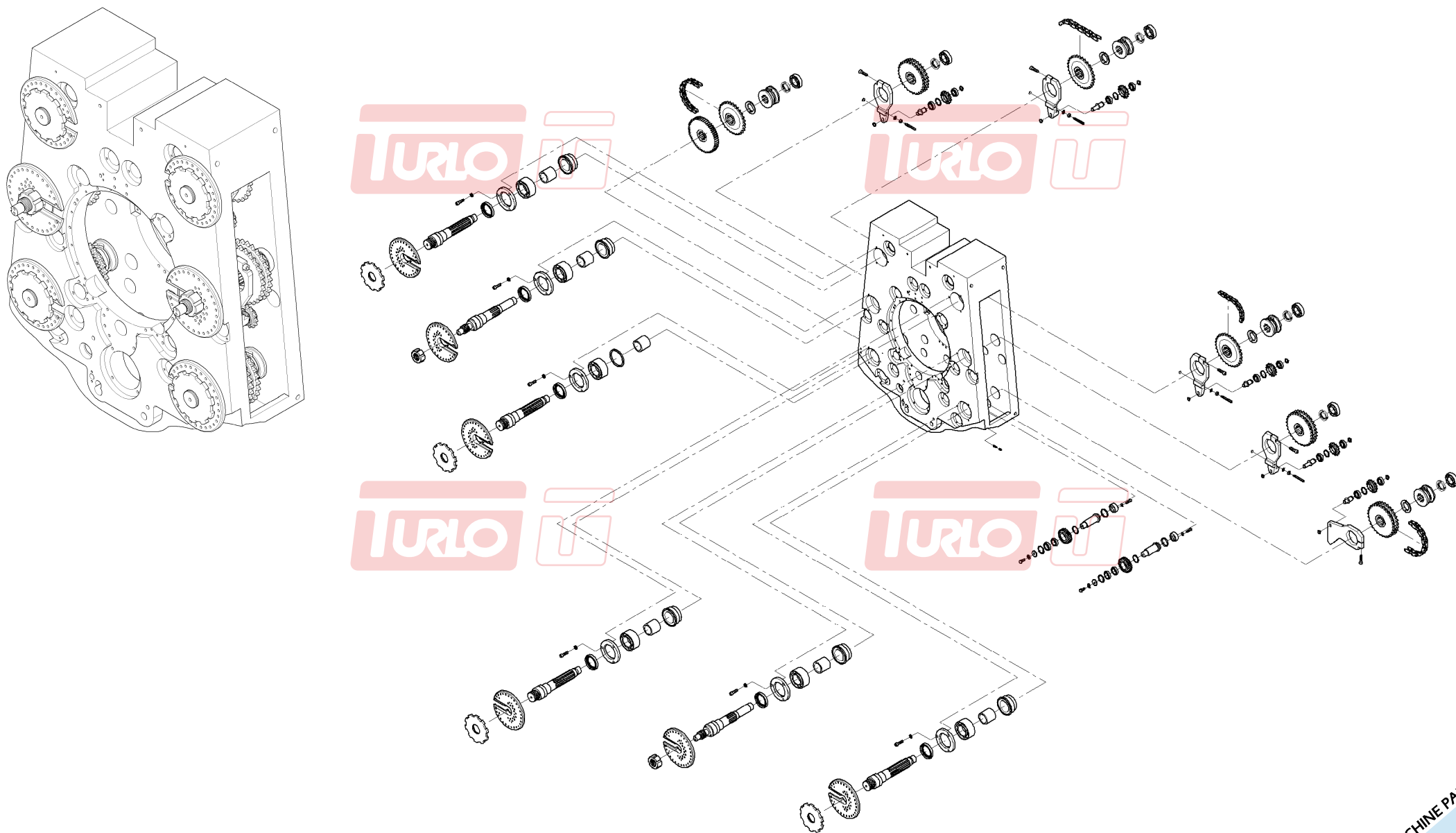






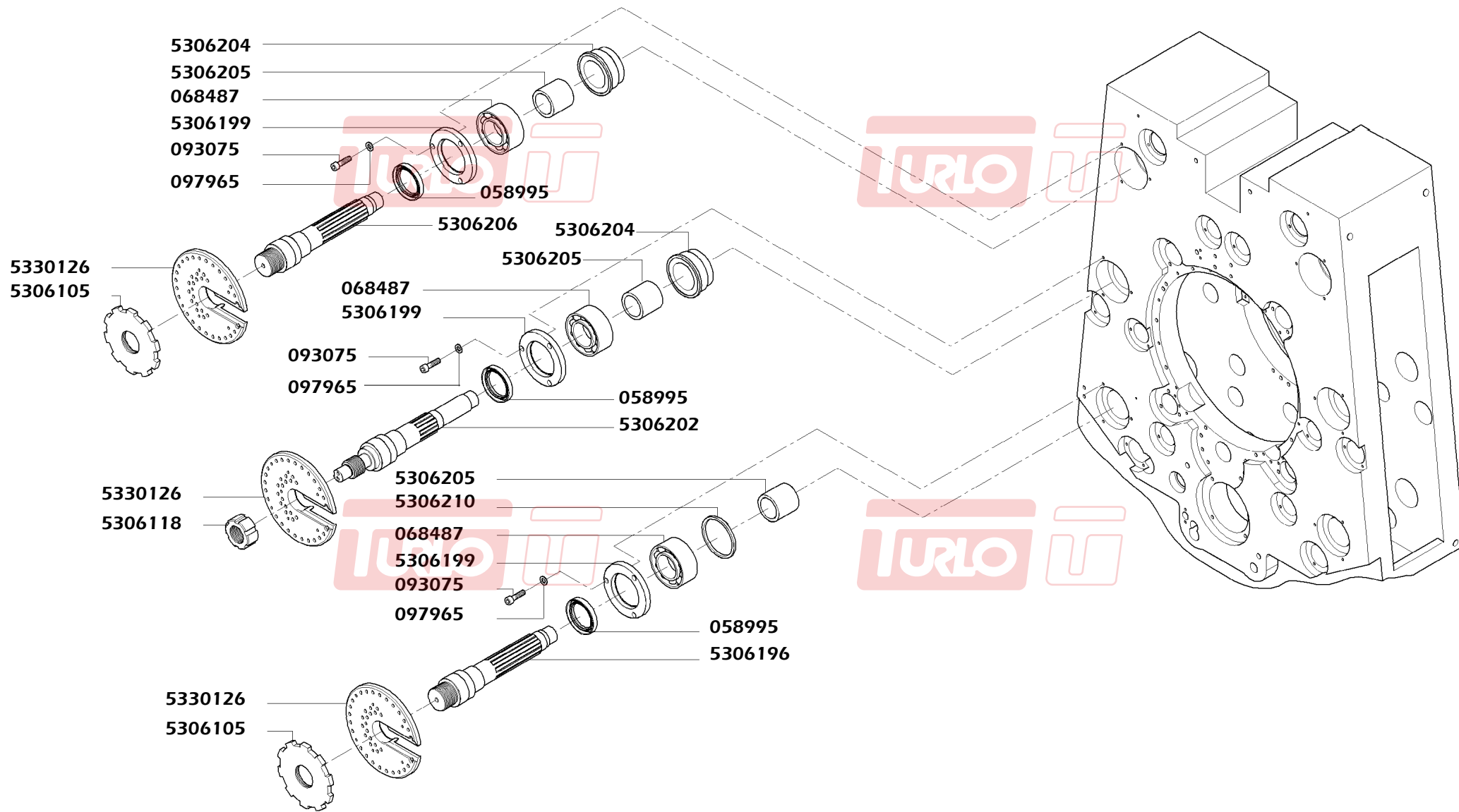
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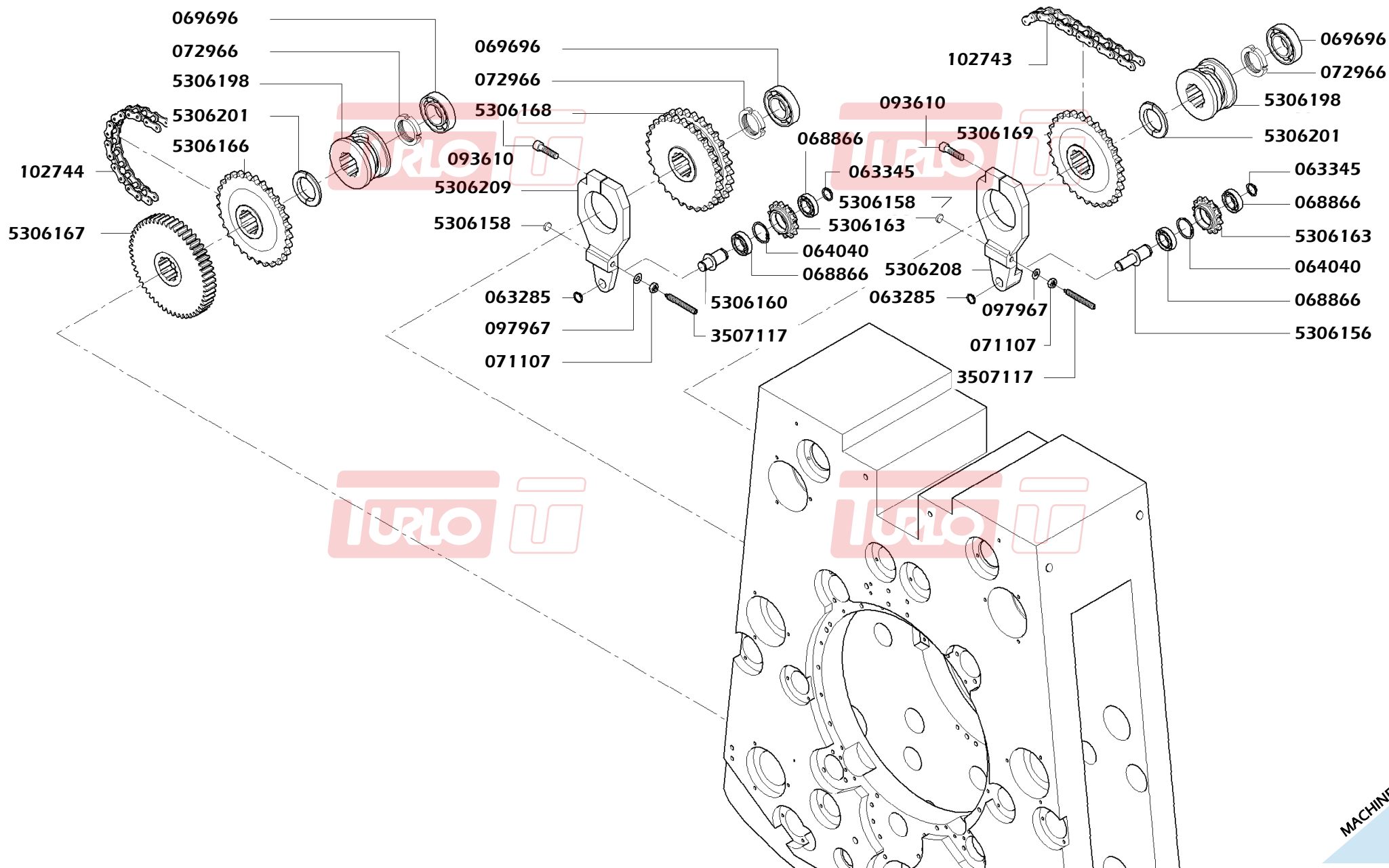
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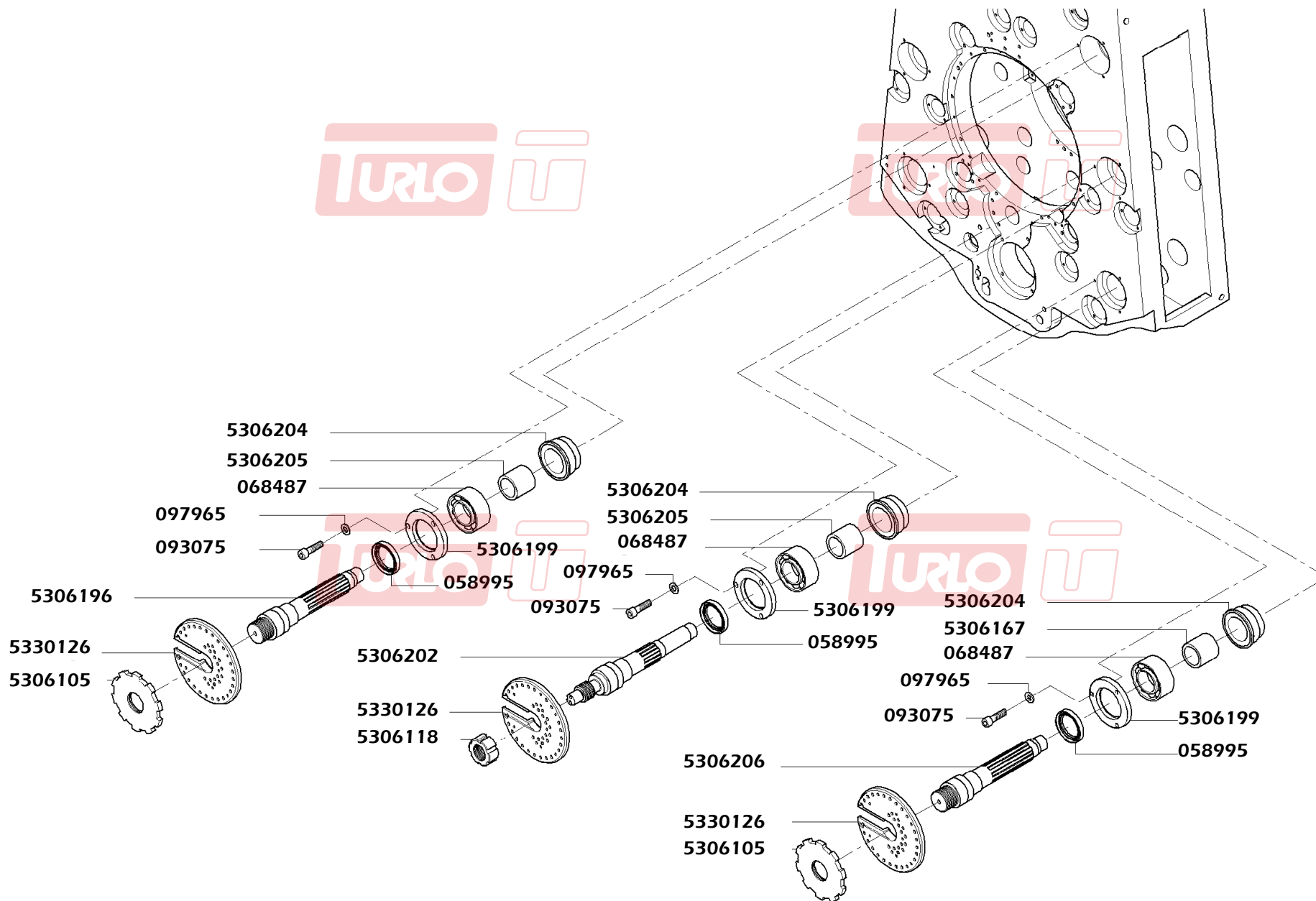


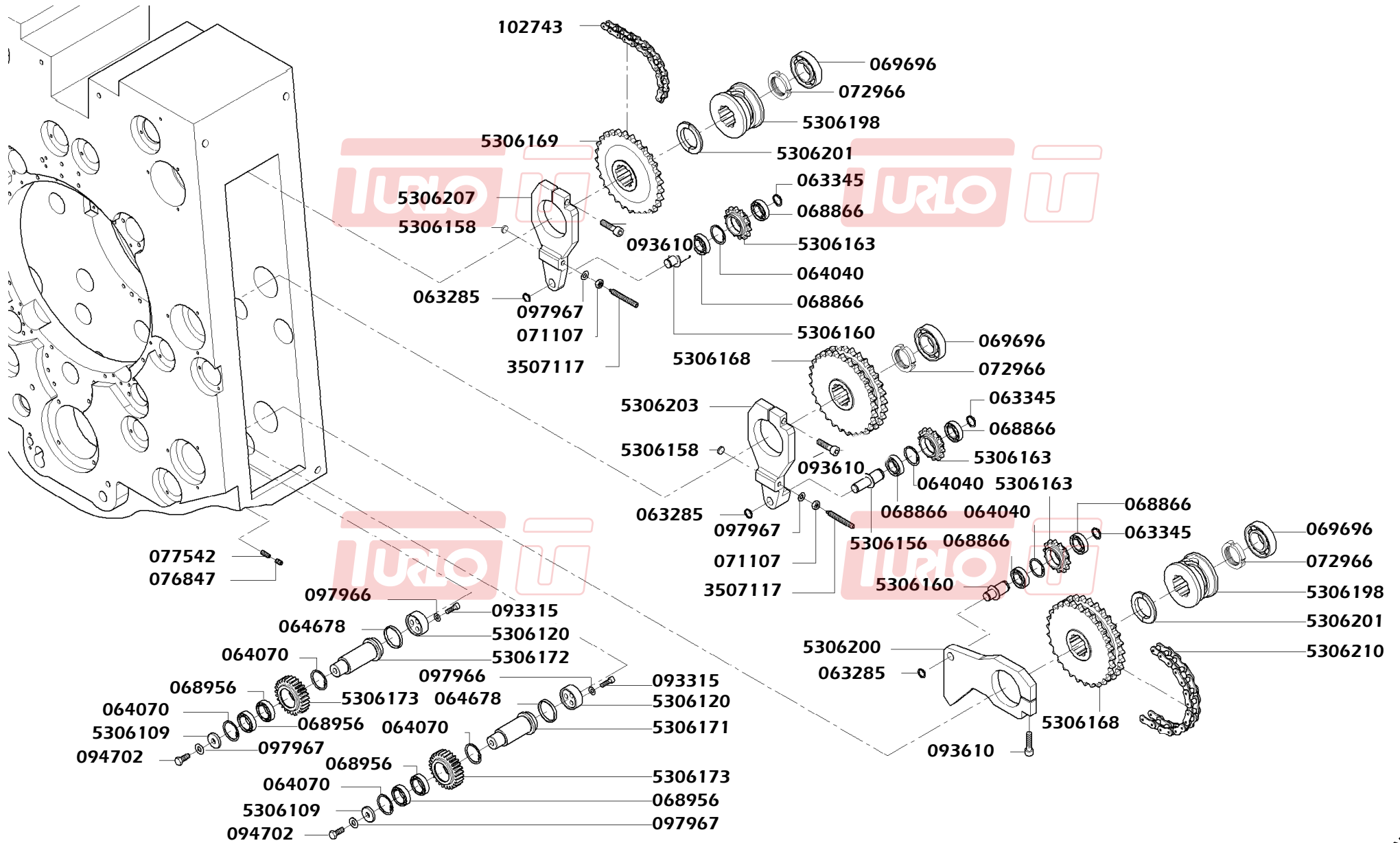
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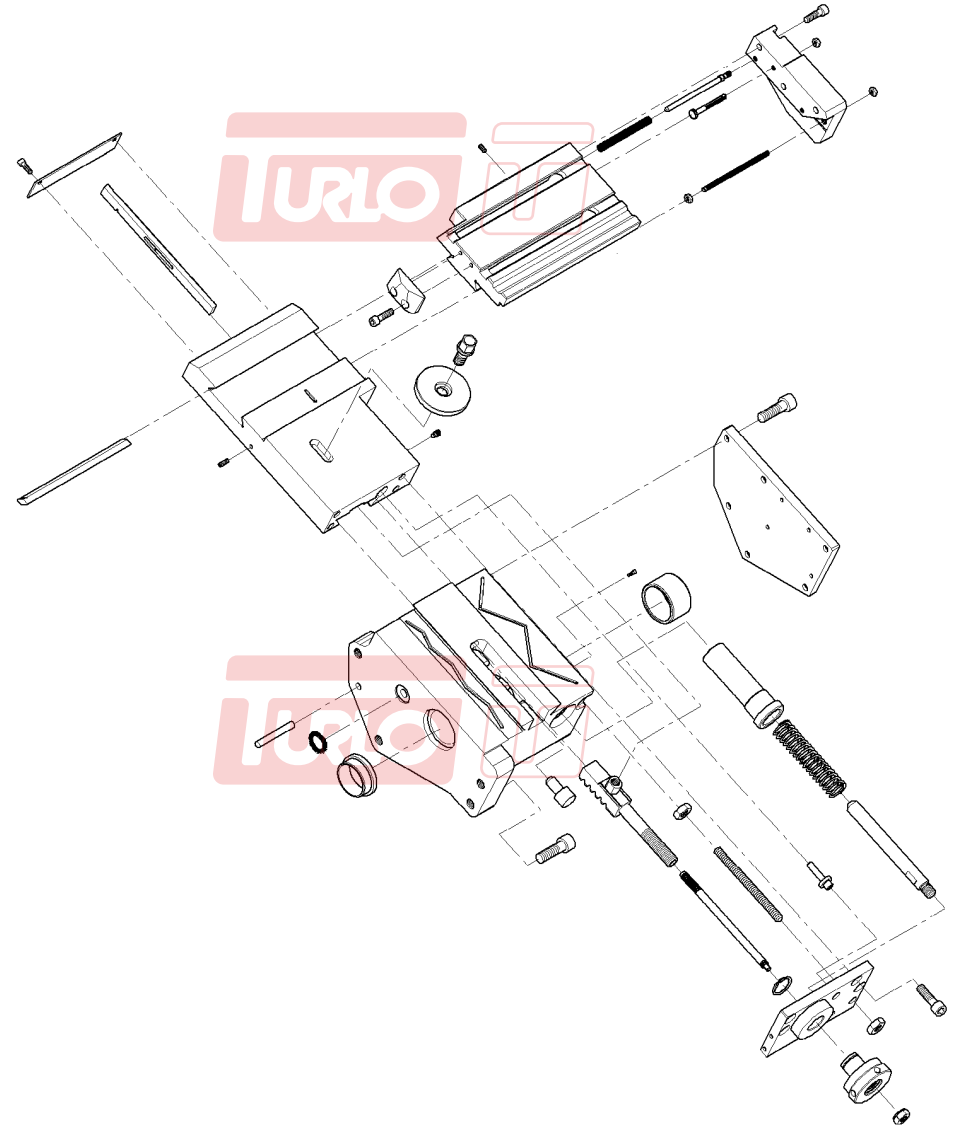
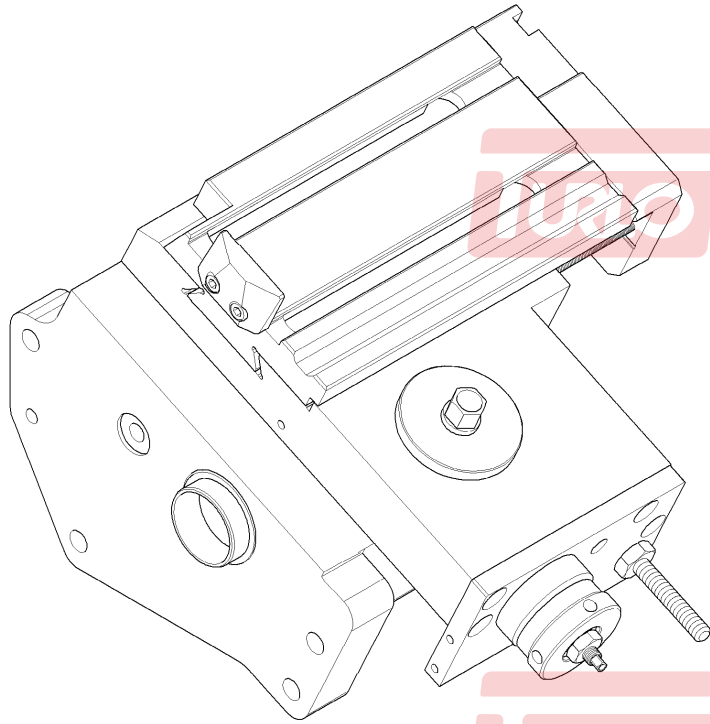




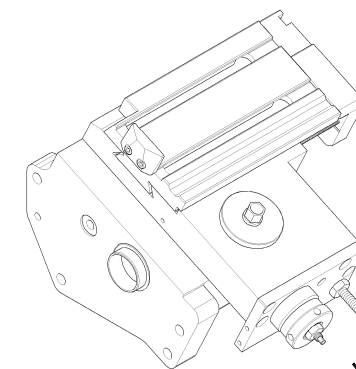
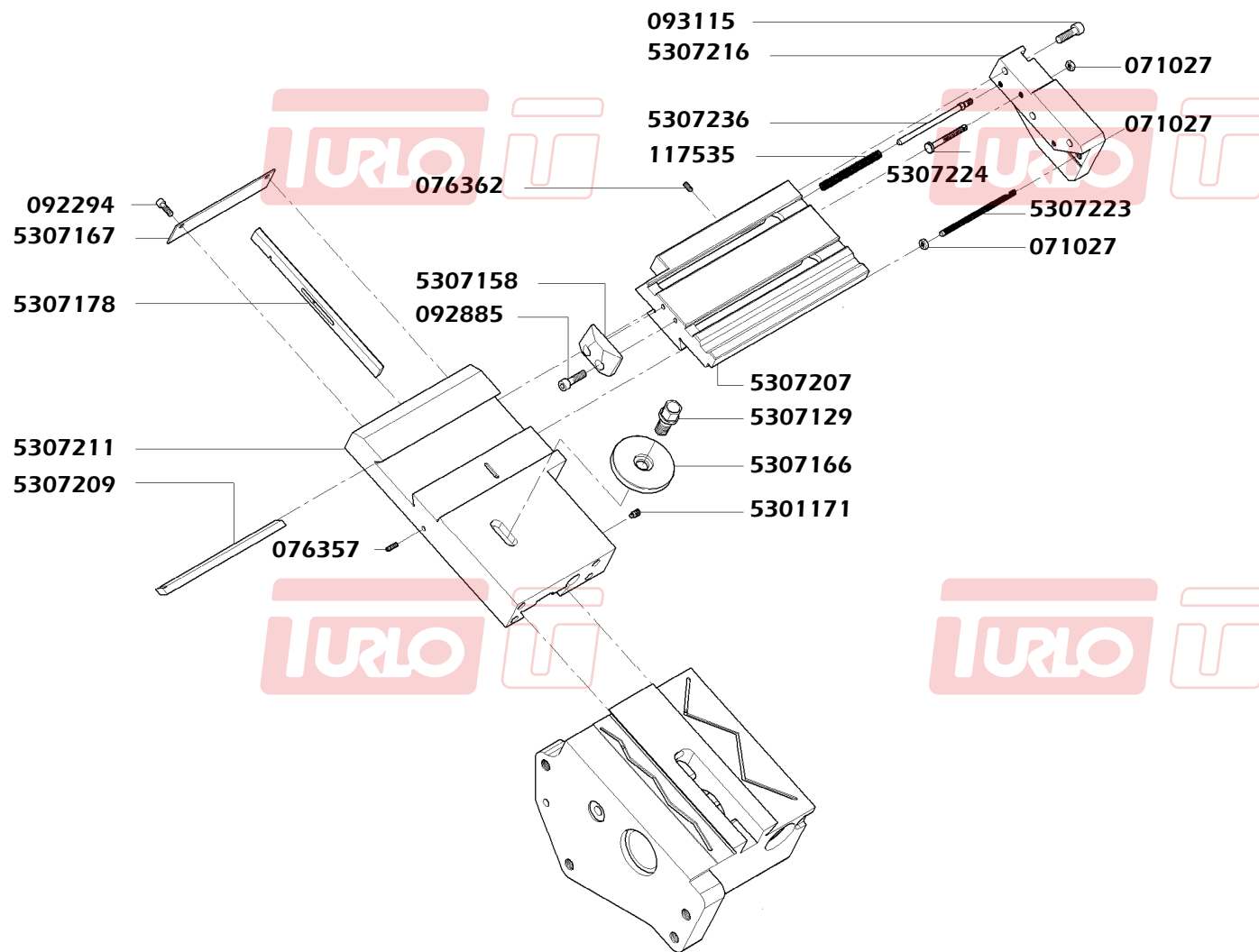


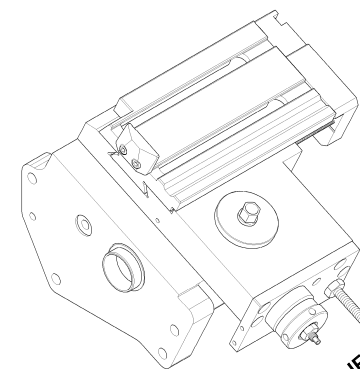
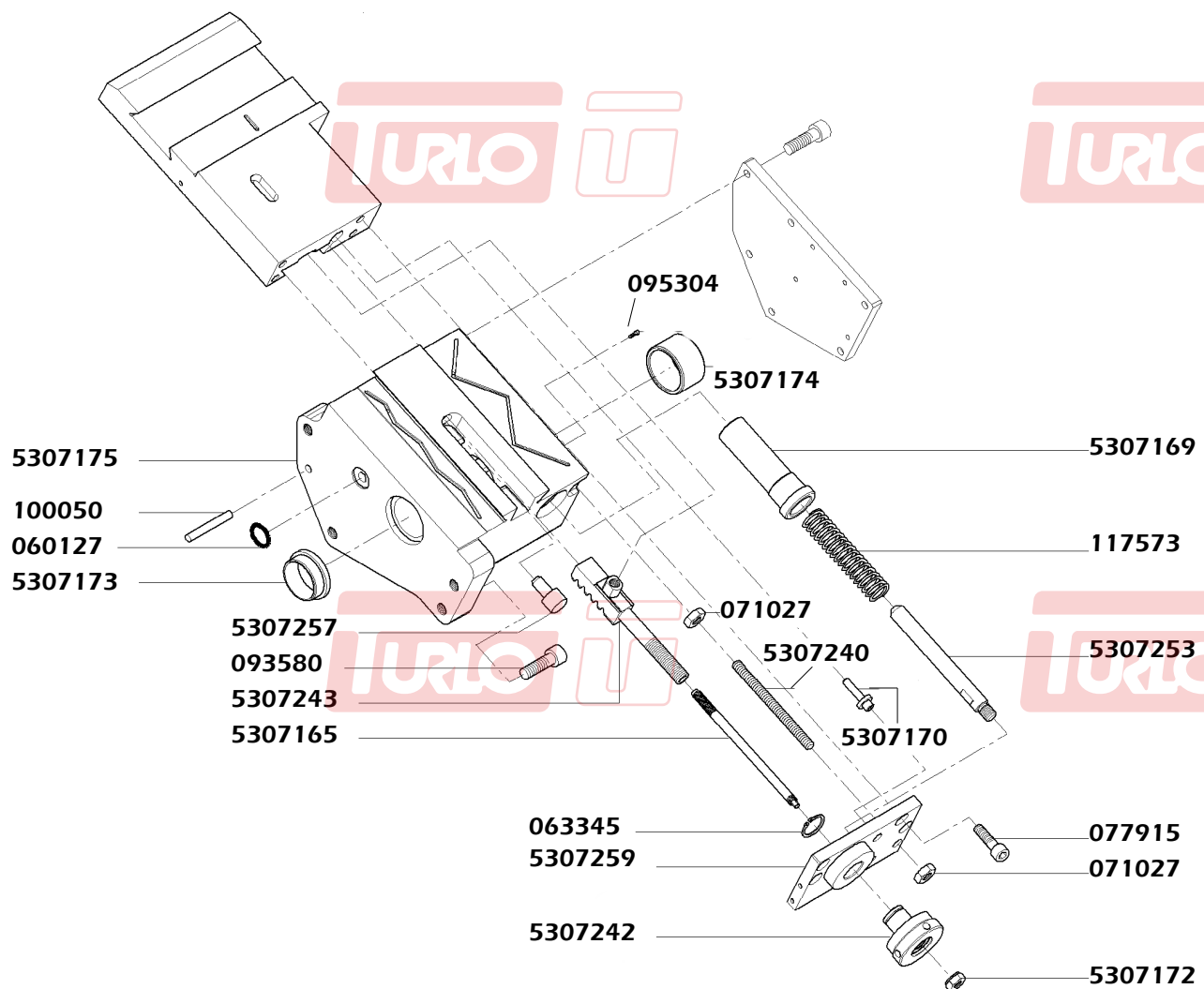
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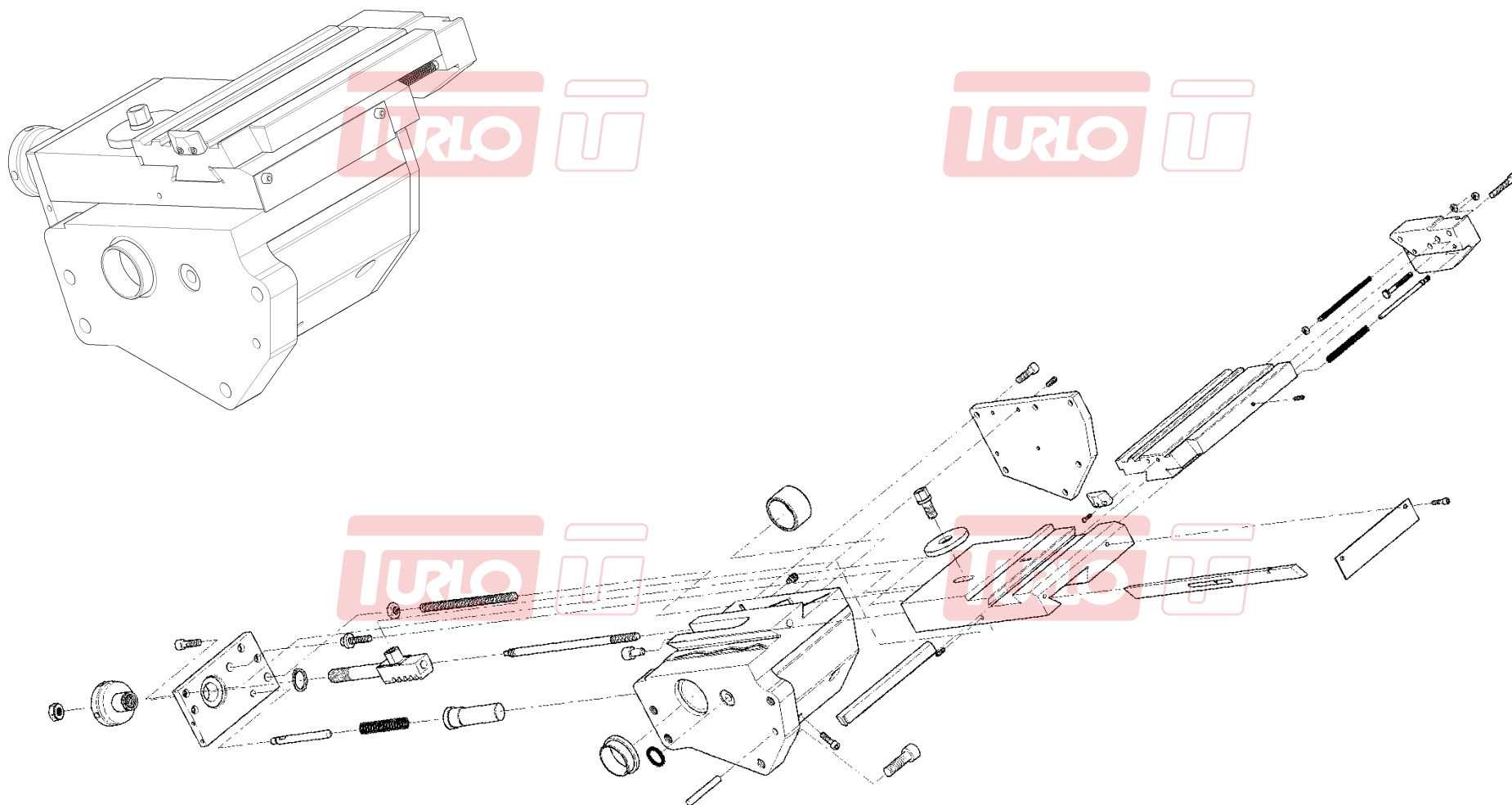
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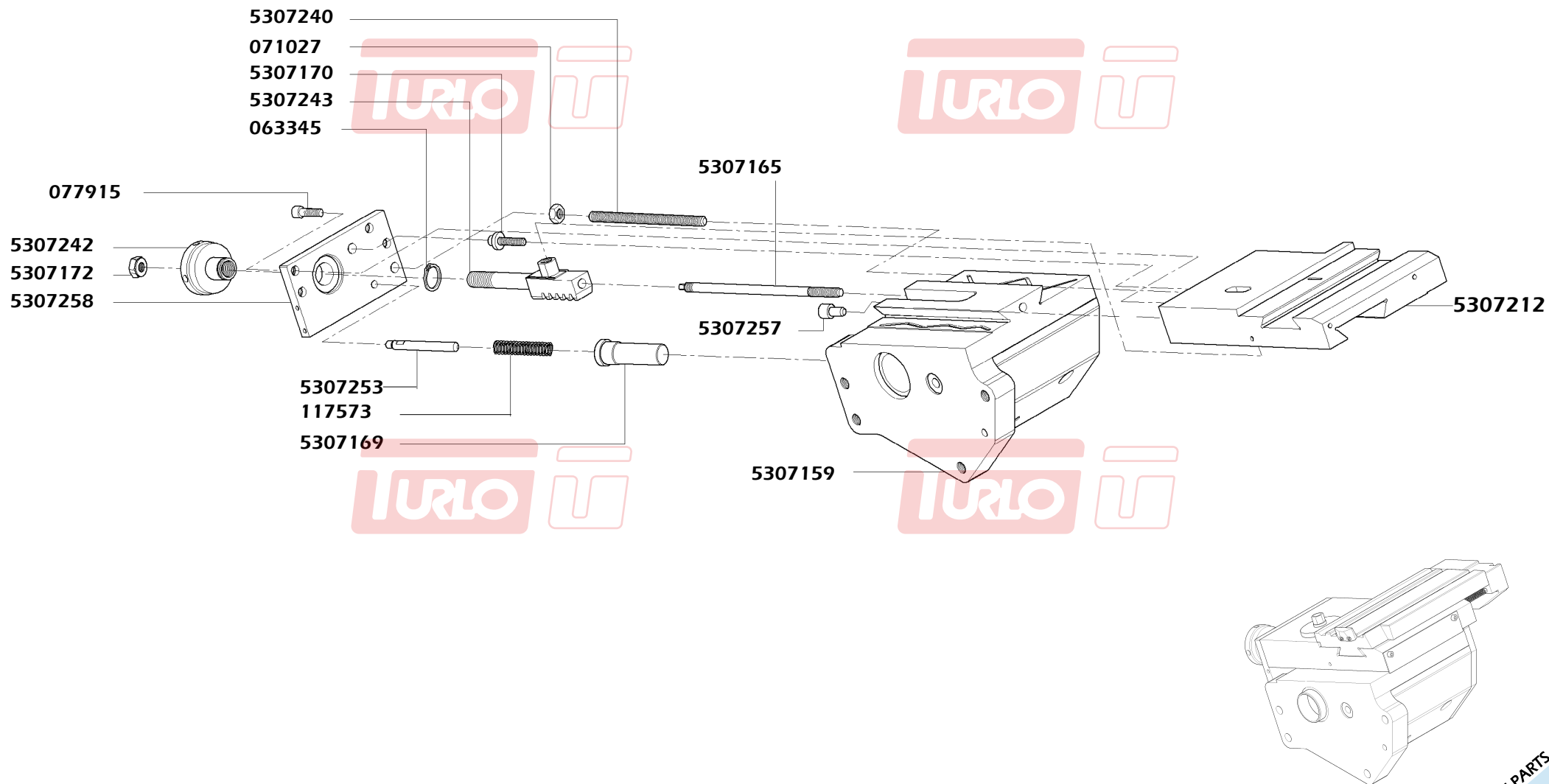


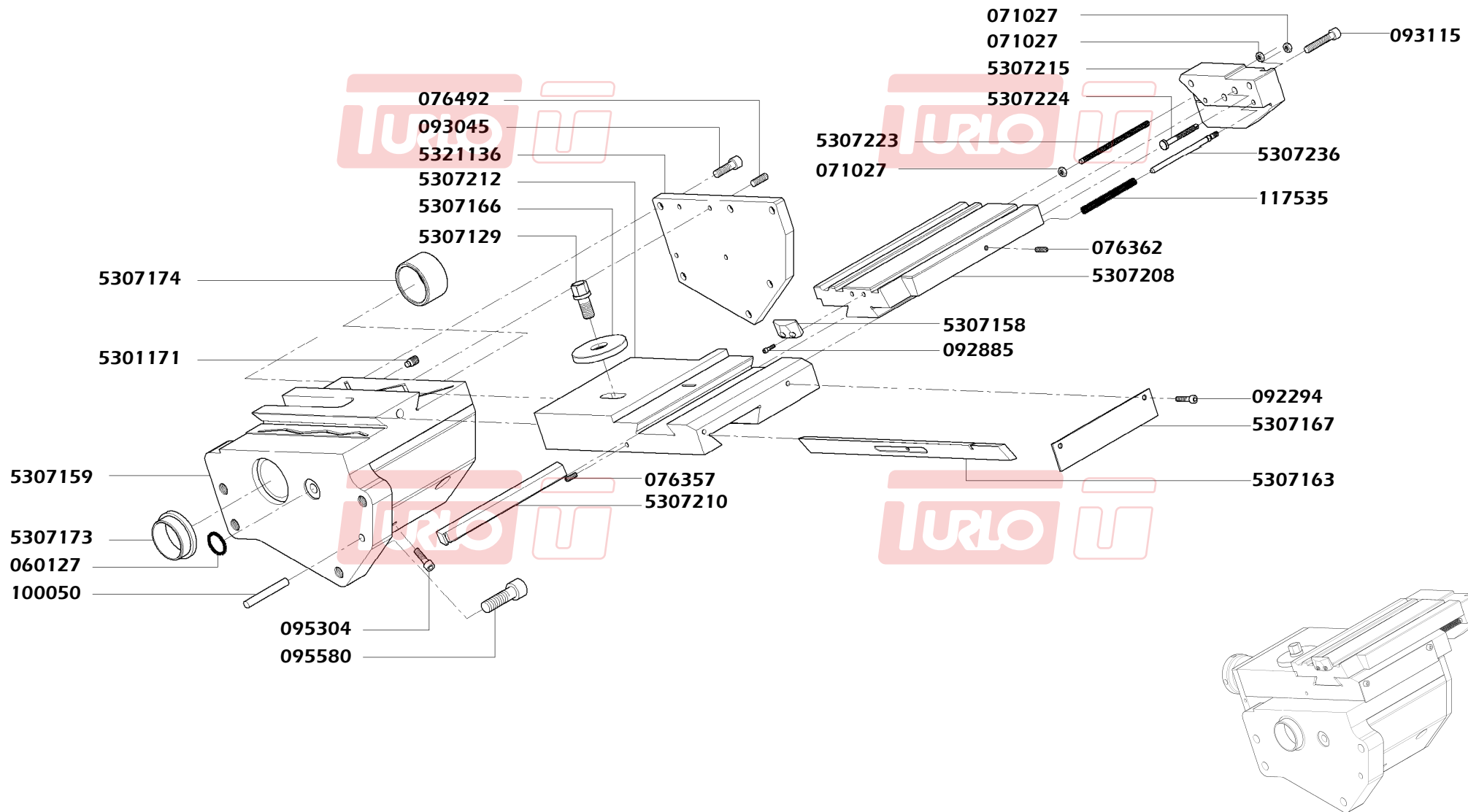


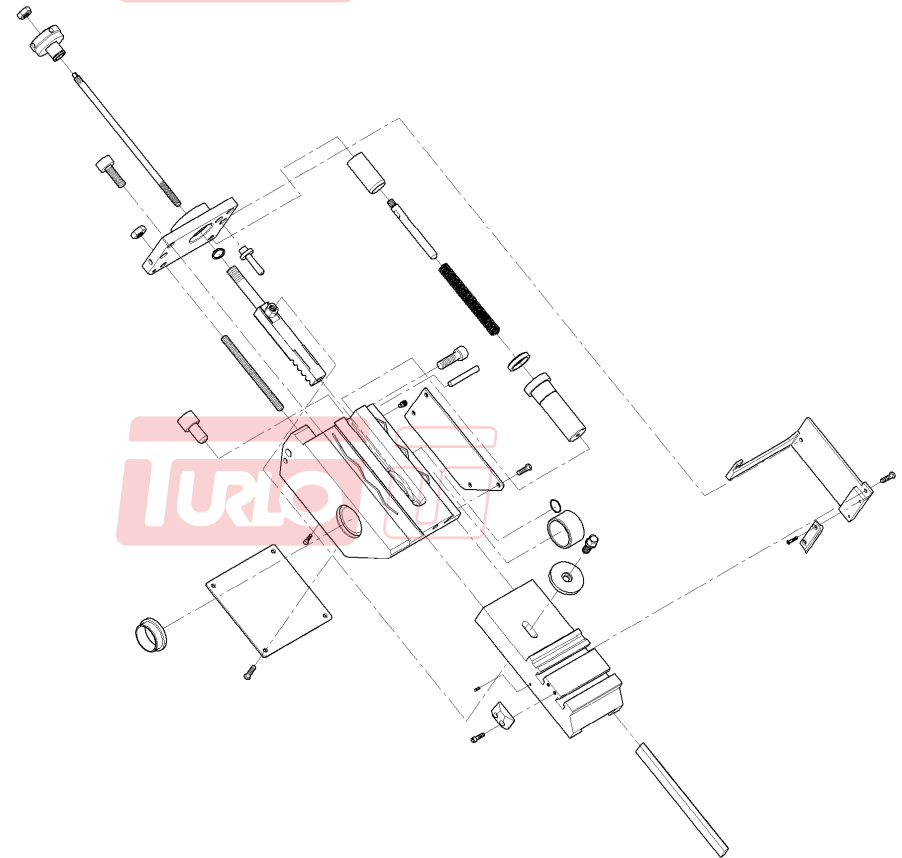
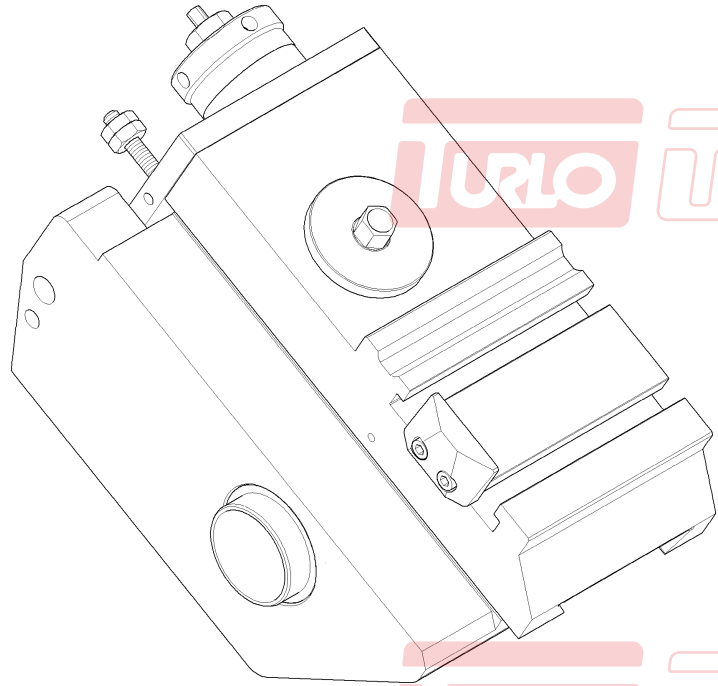


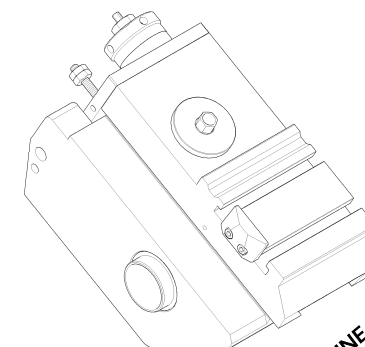
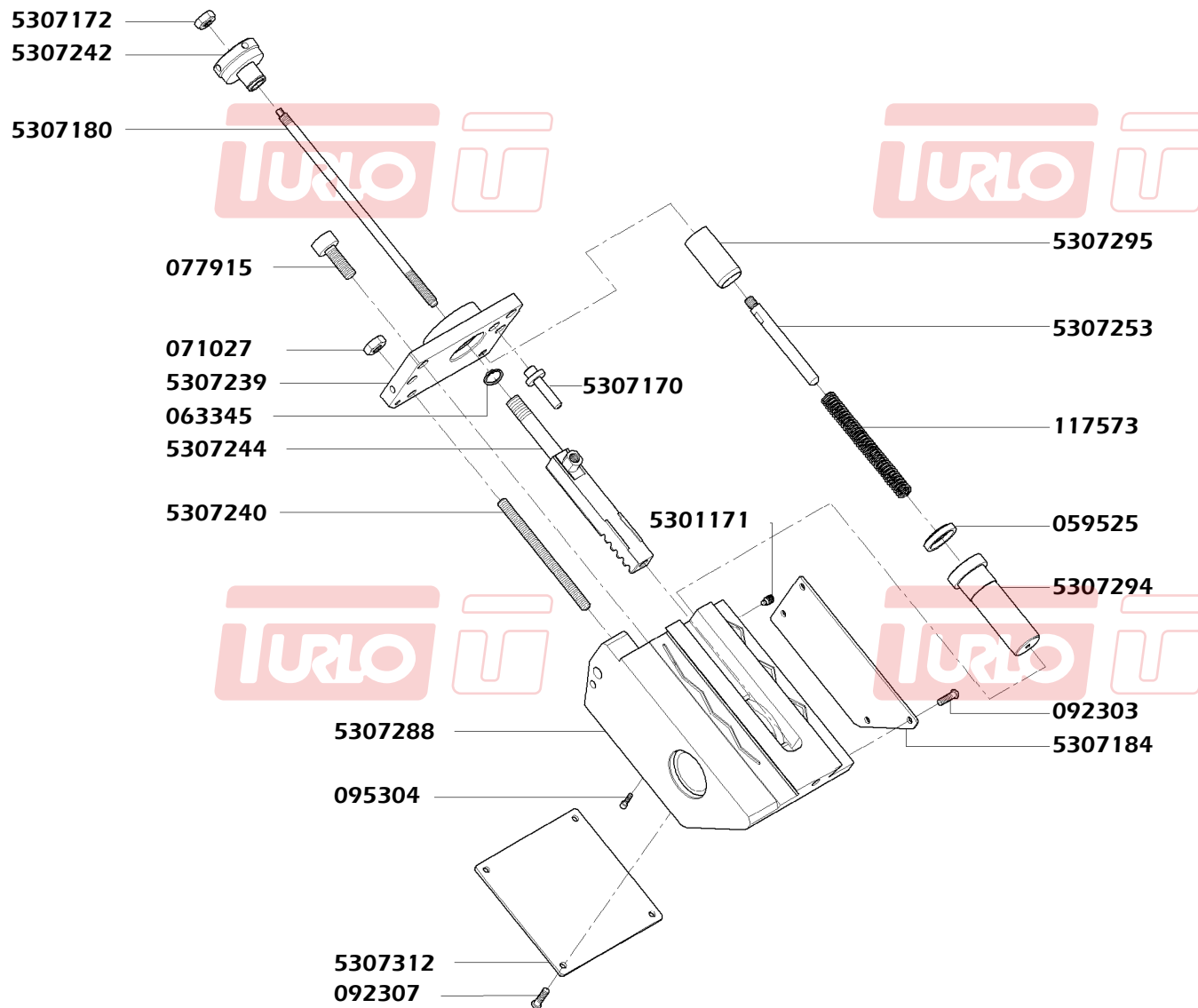


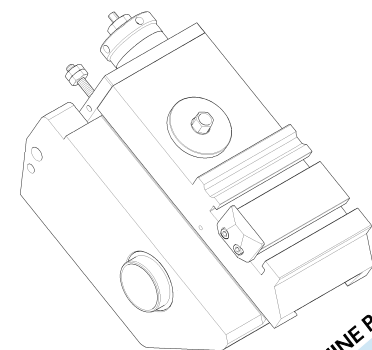
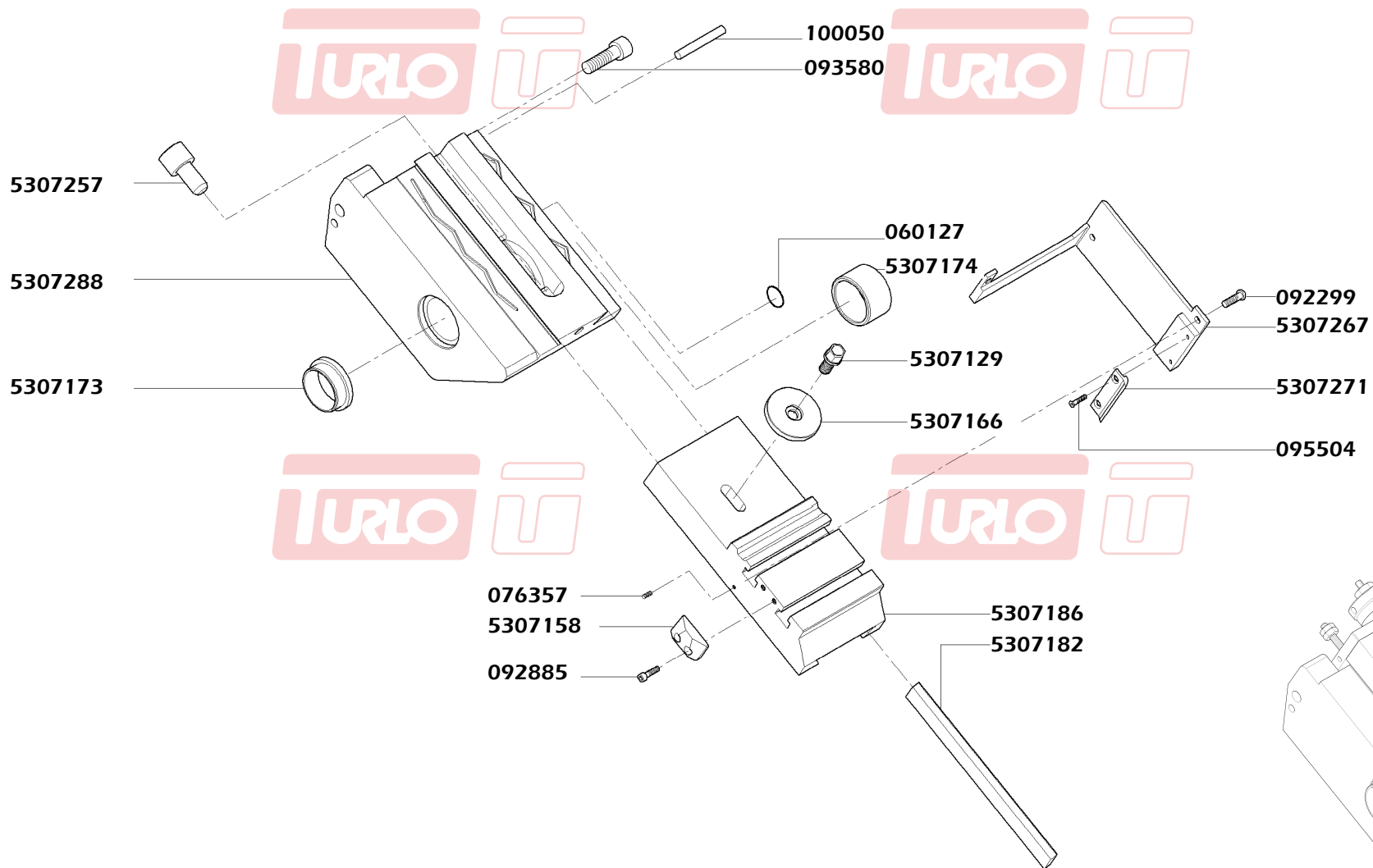










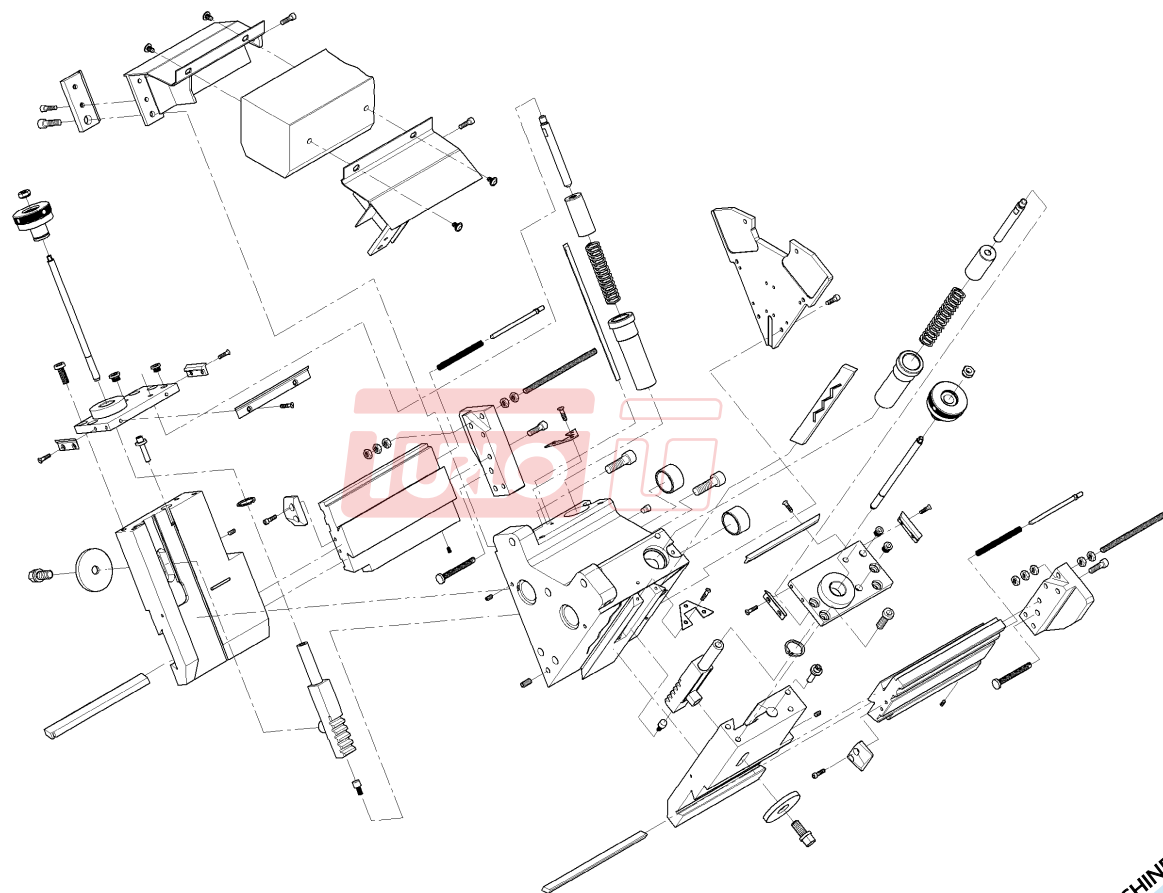
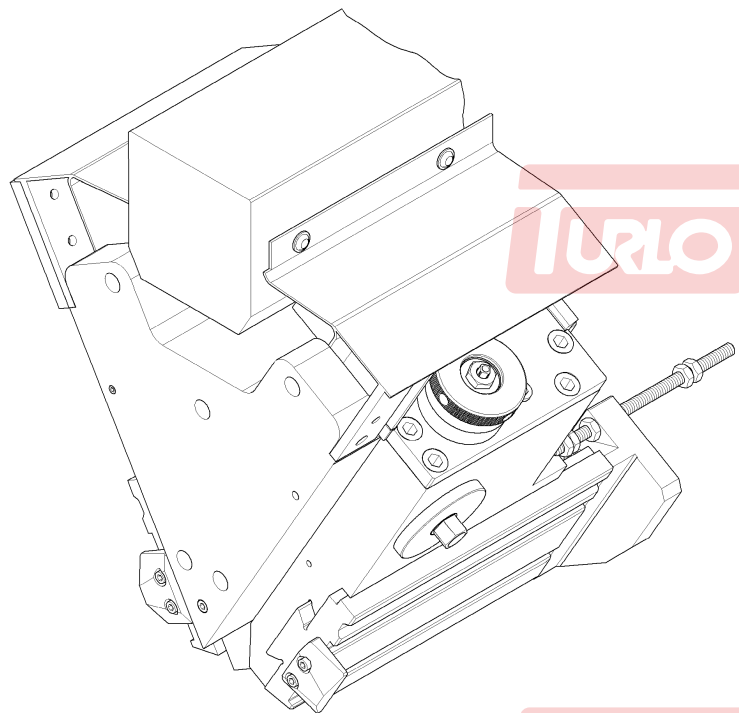


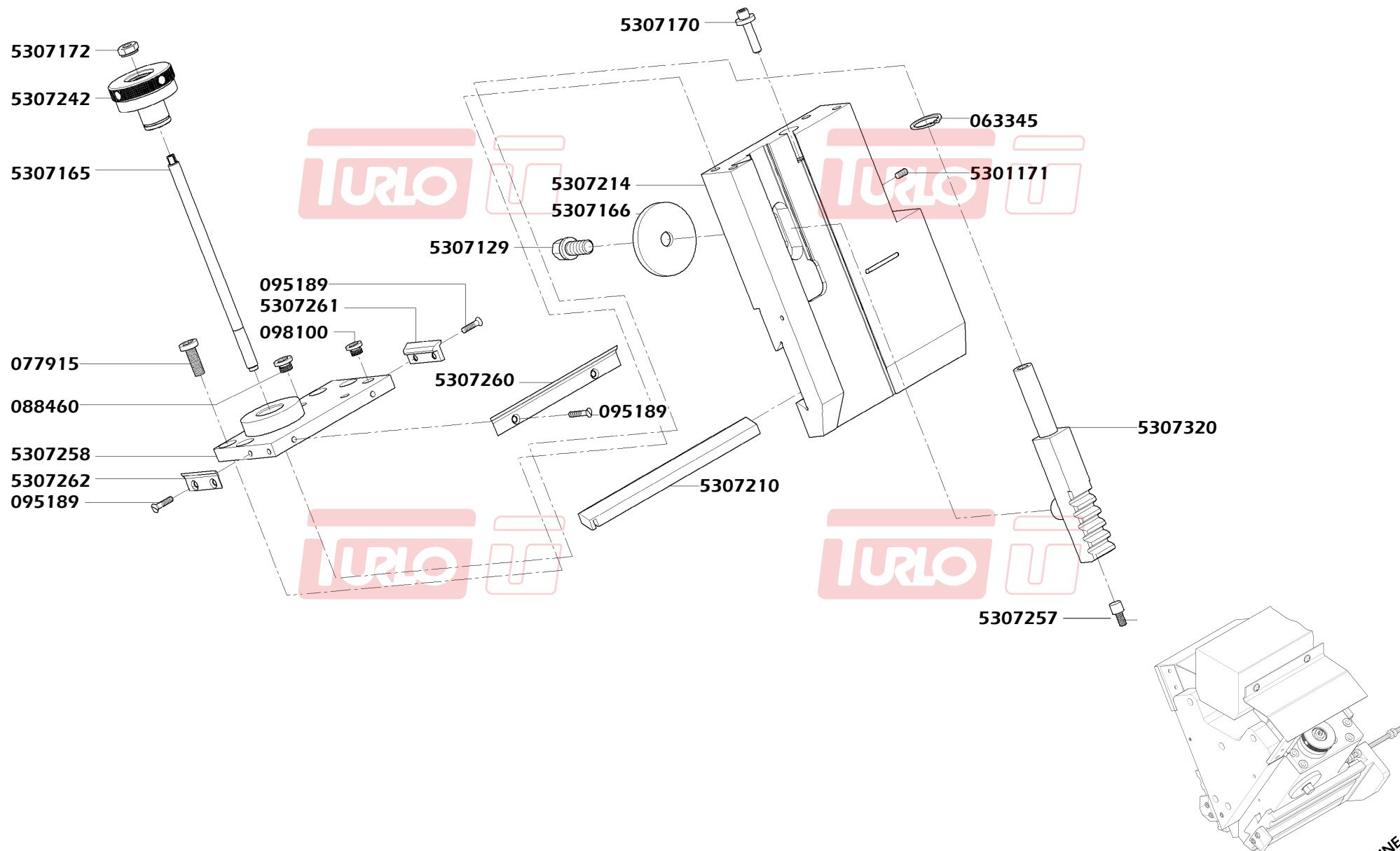


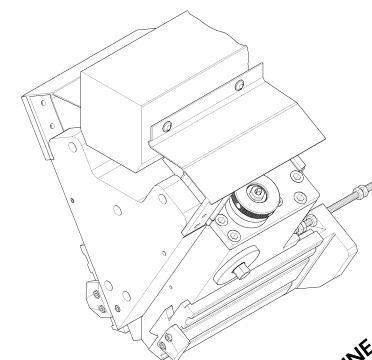
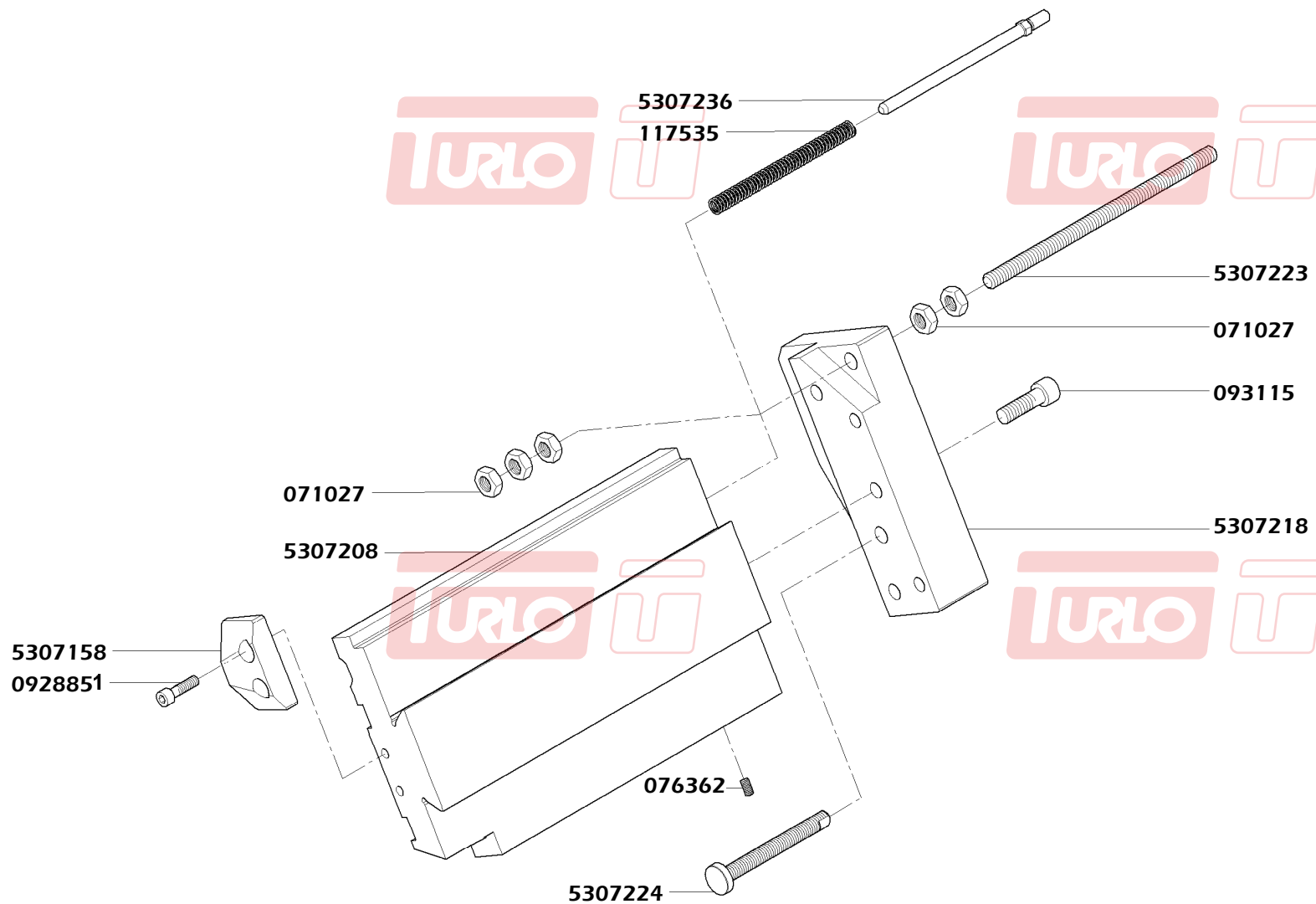


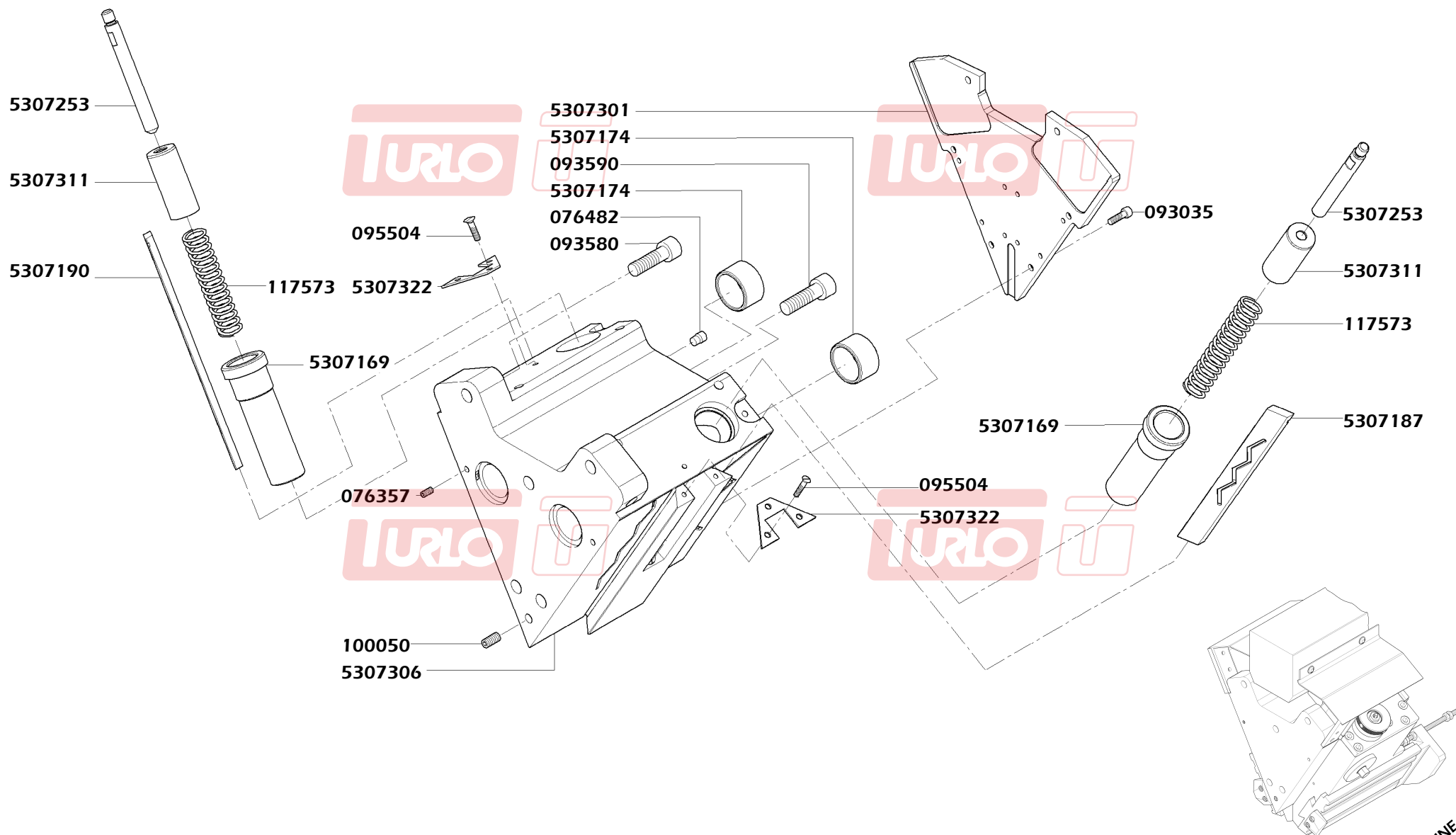
# GILDEMEISTER GM16-6

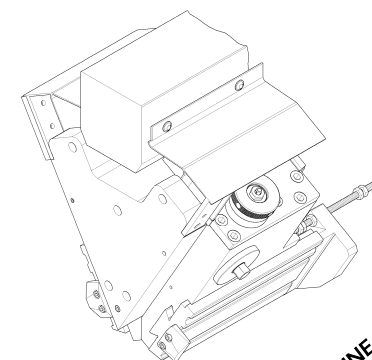
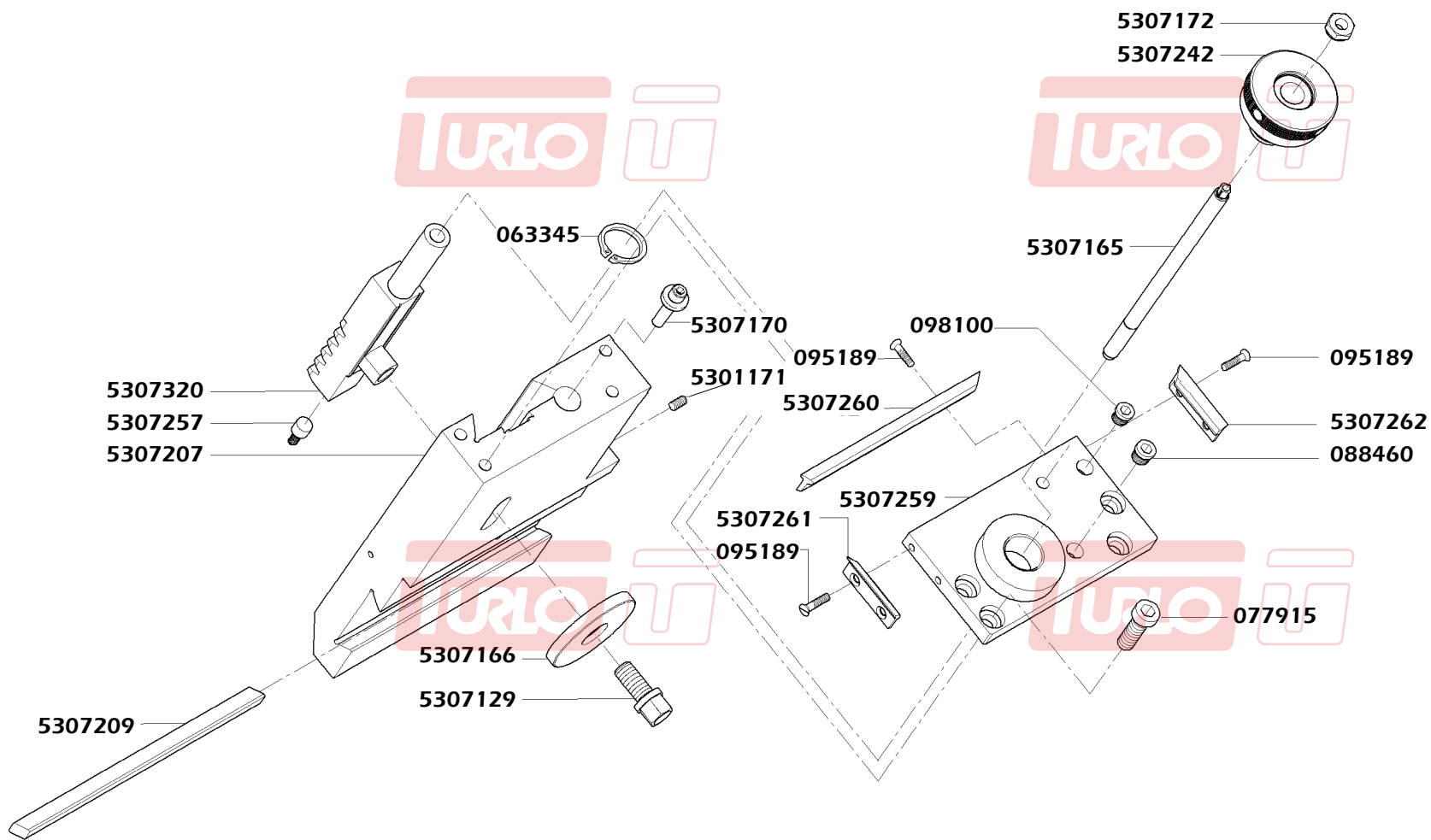
5307029 Slitte radiali pos.4-5 con slitte assiali / *Pos.4-5 cross slides with axial slides*

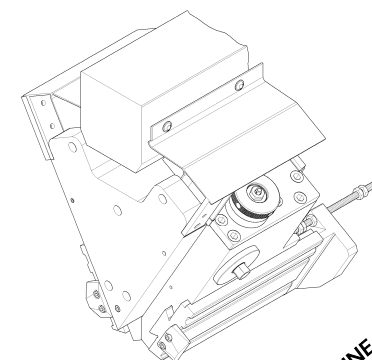
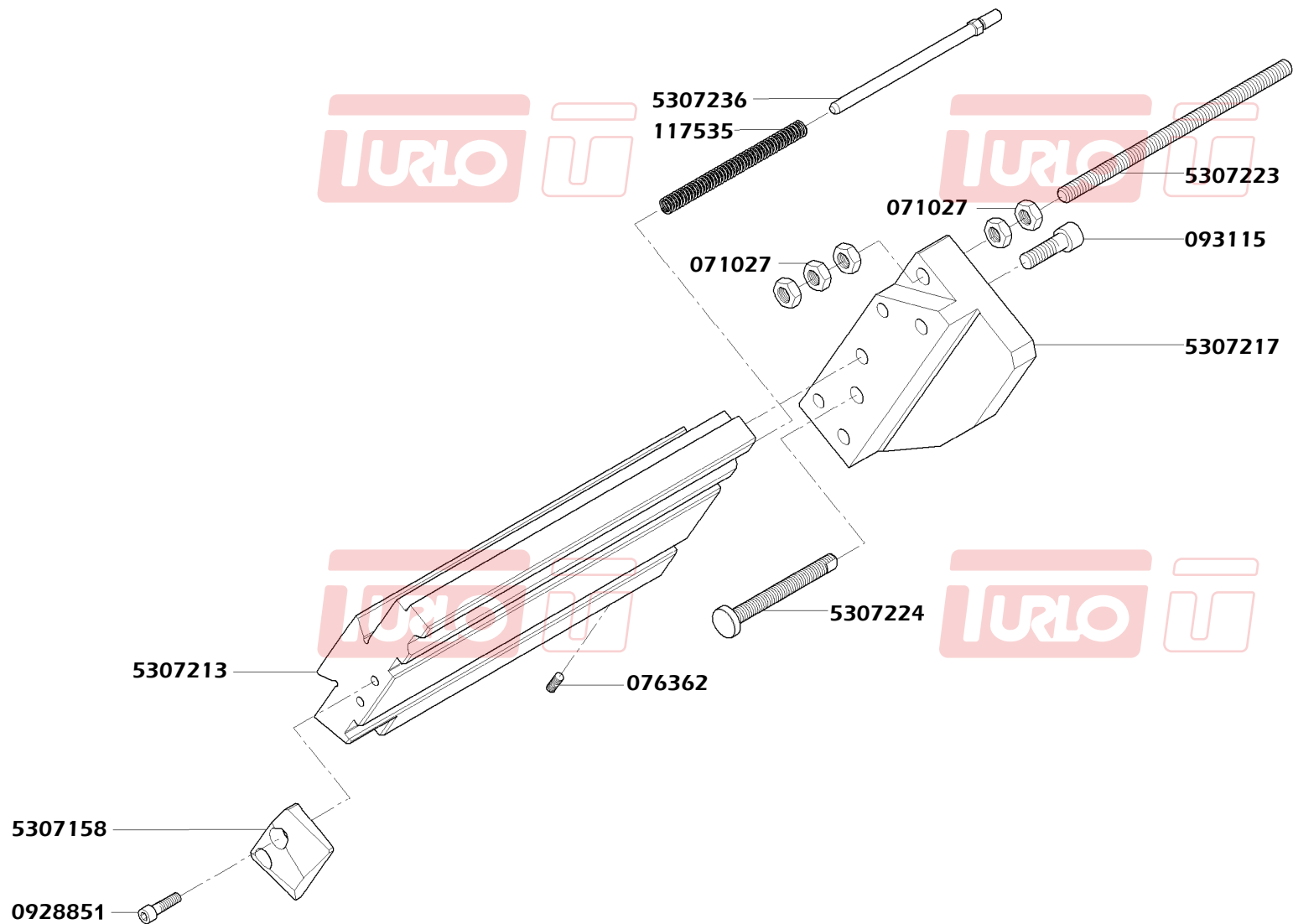


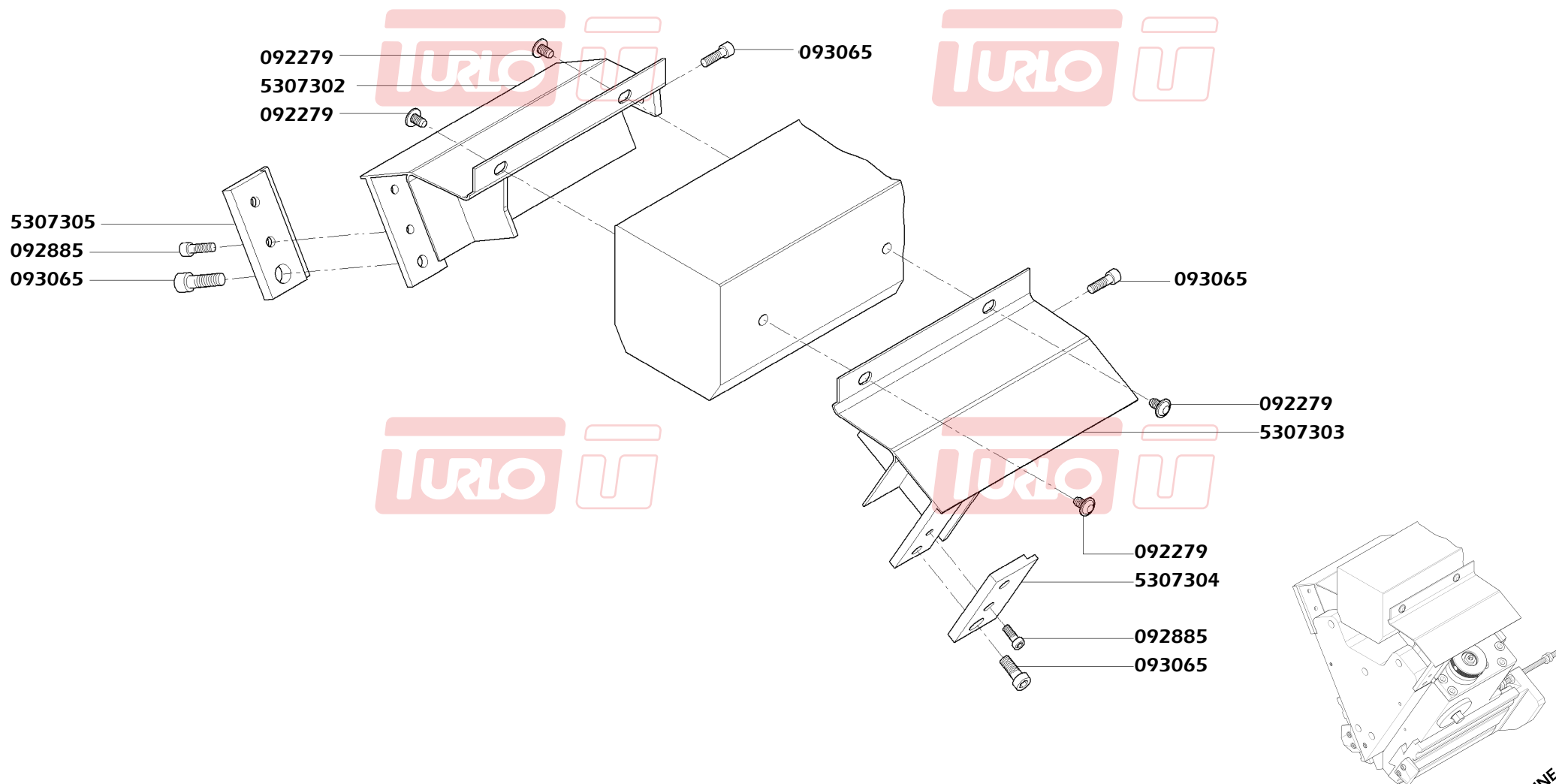


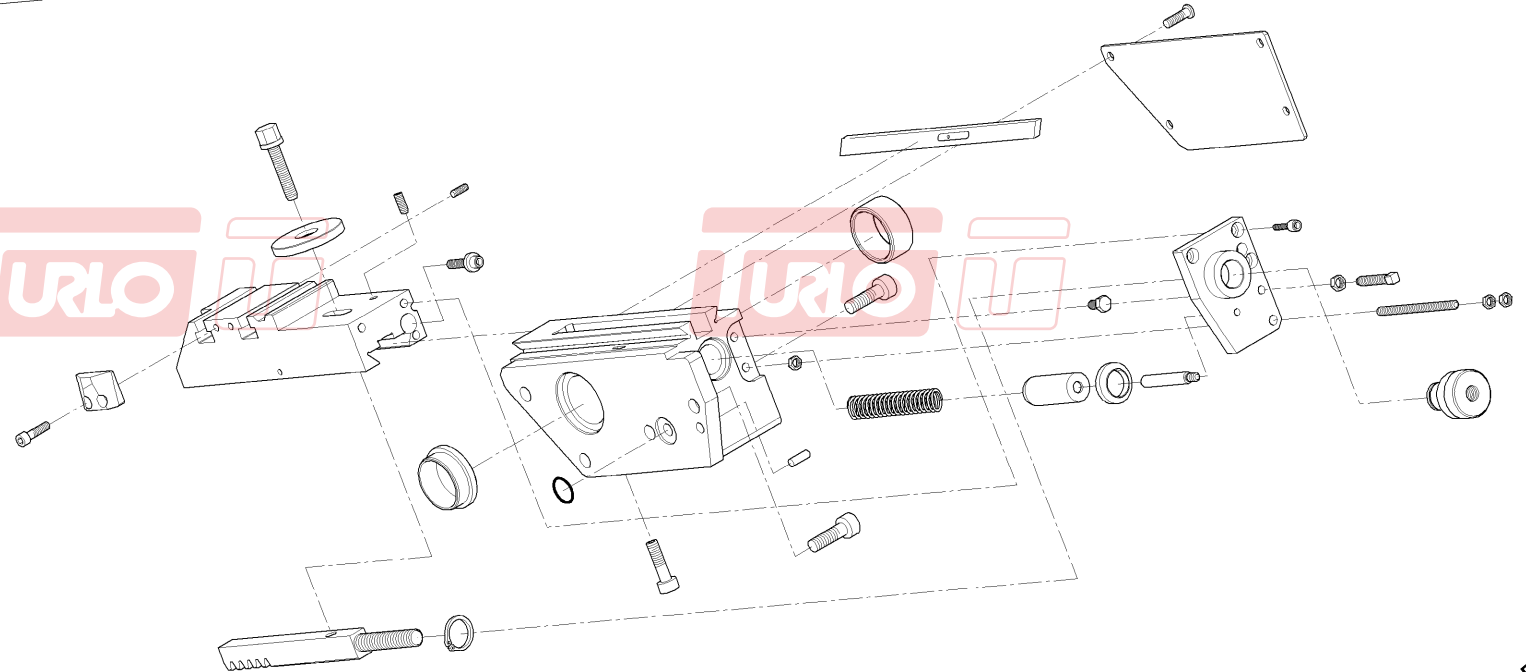
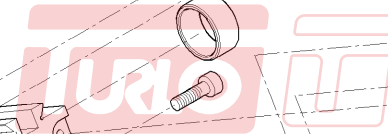
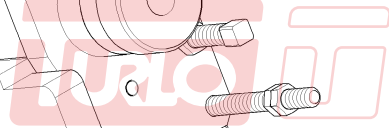
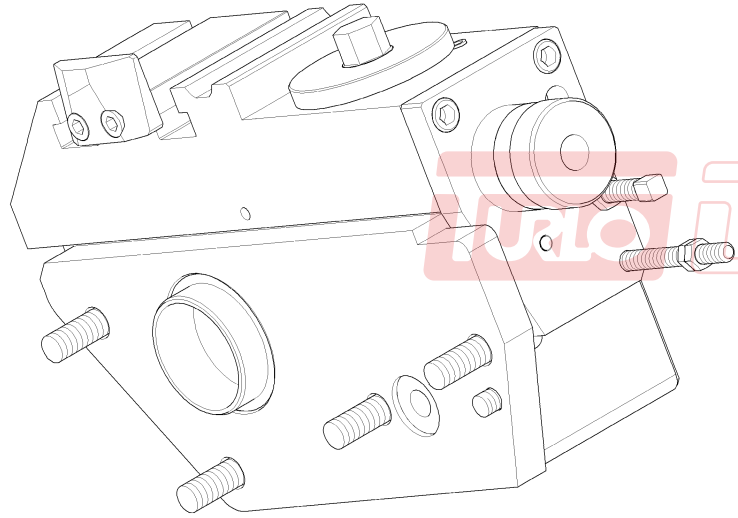




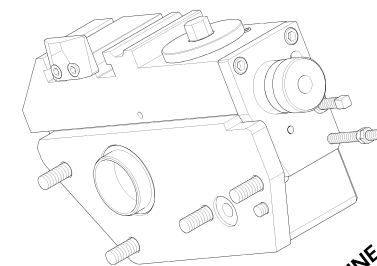
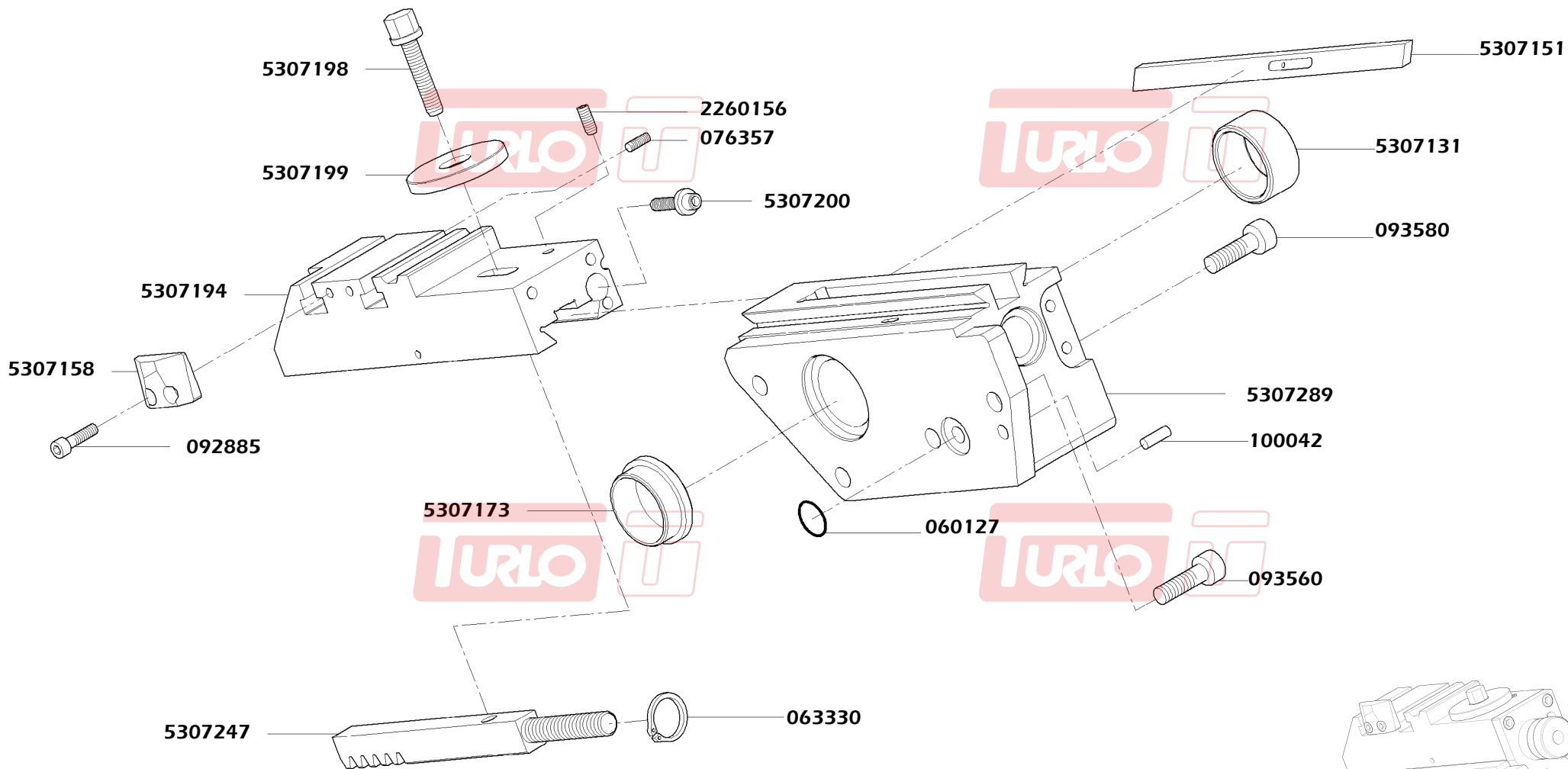


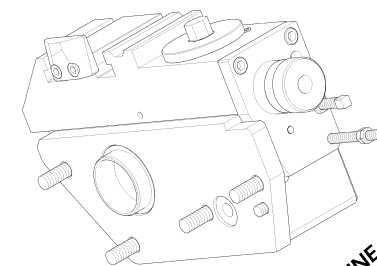
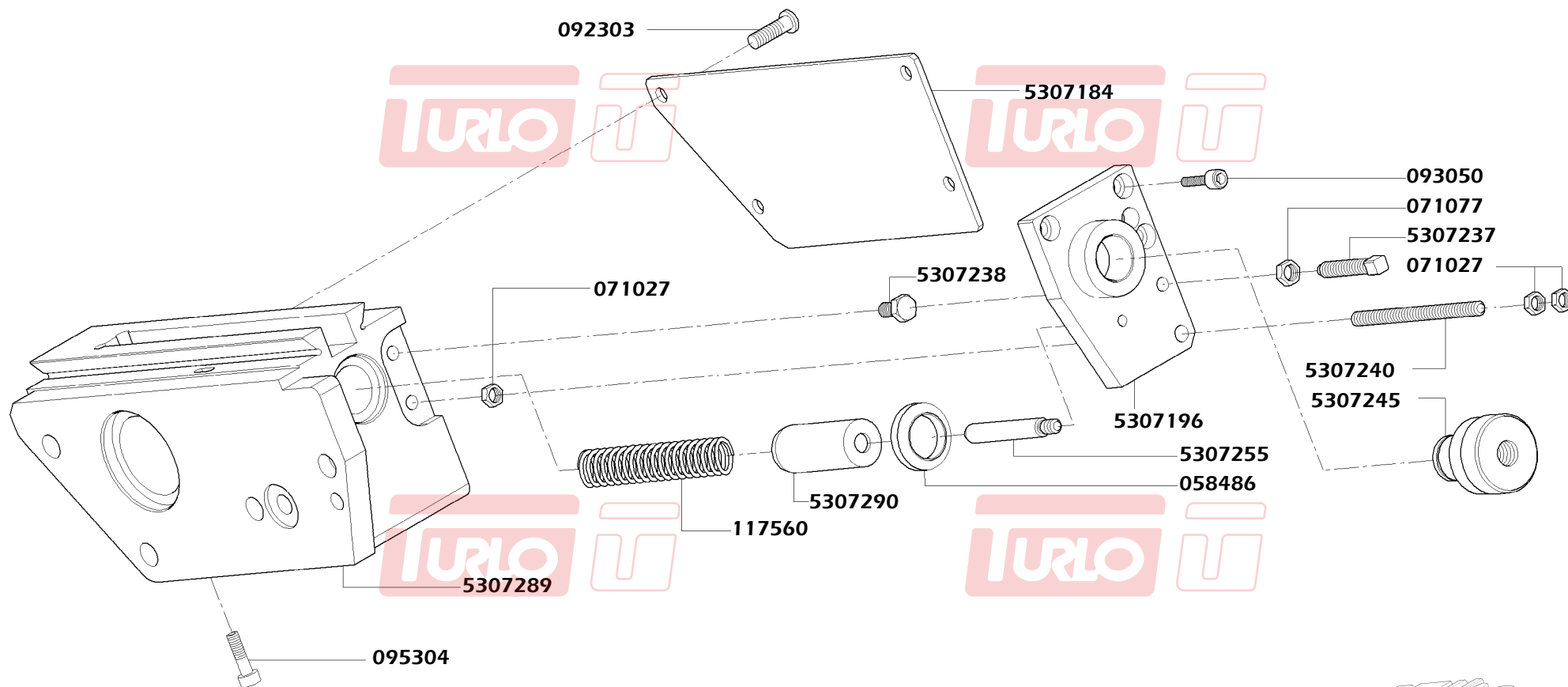


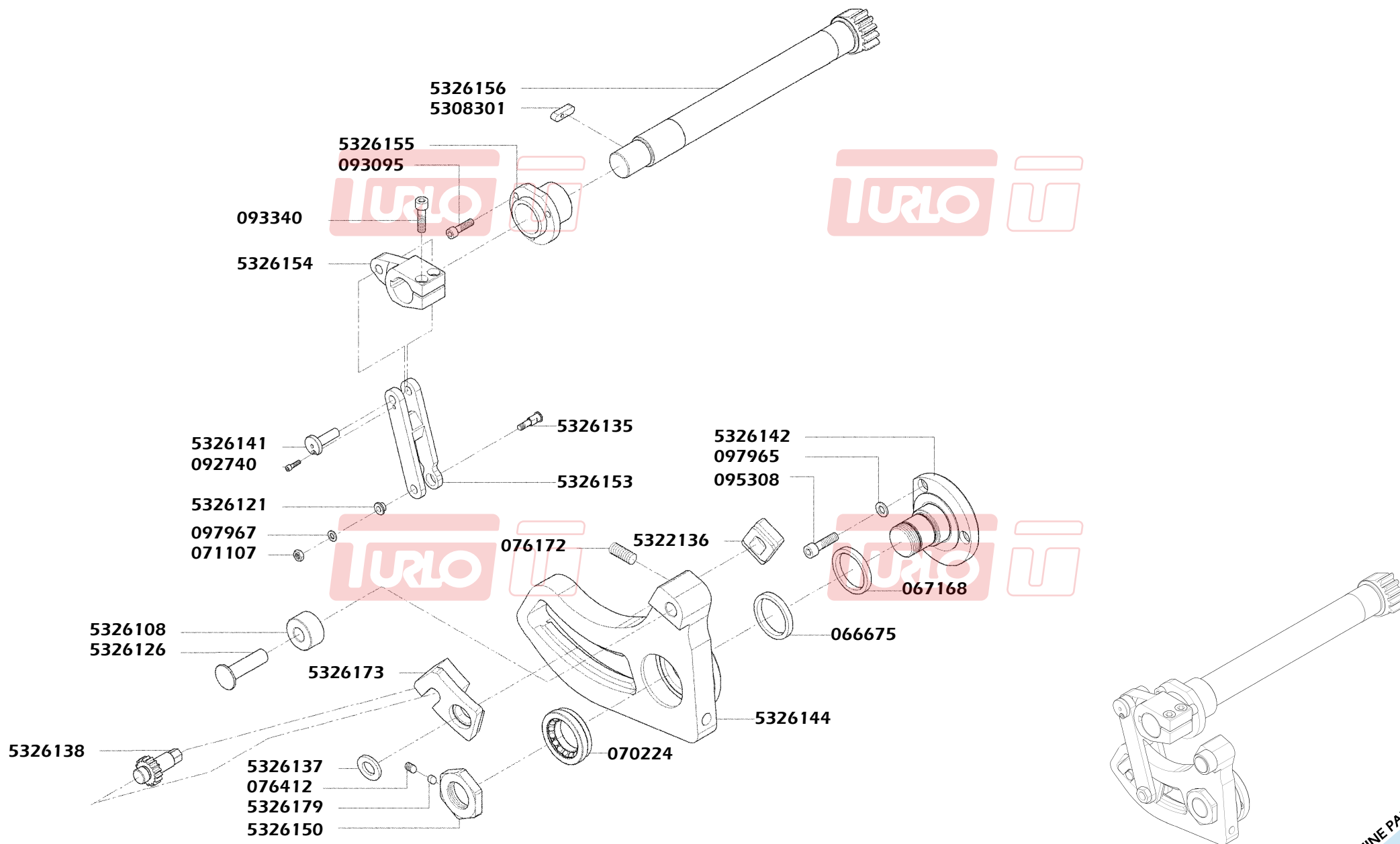


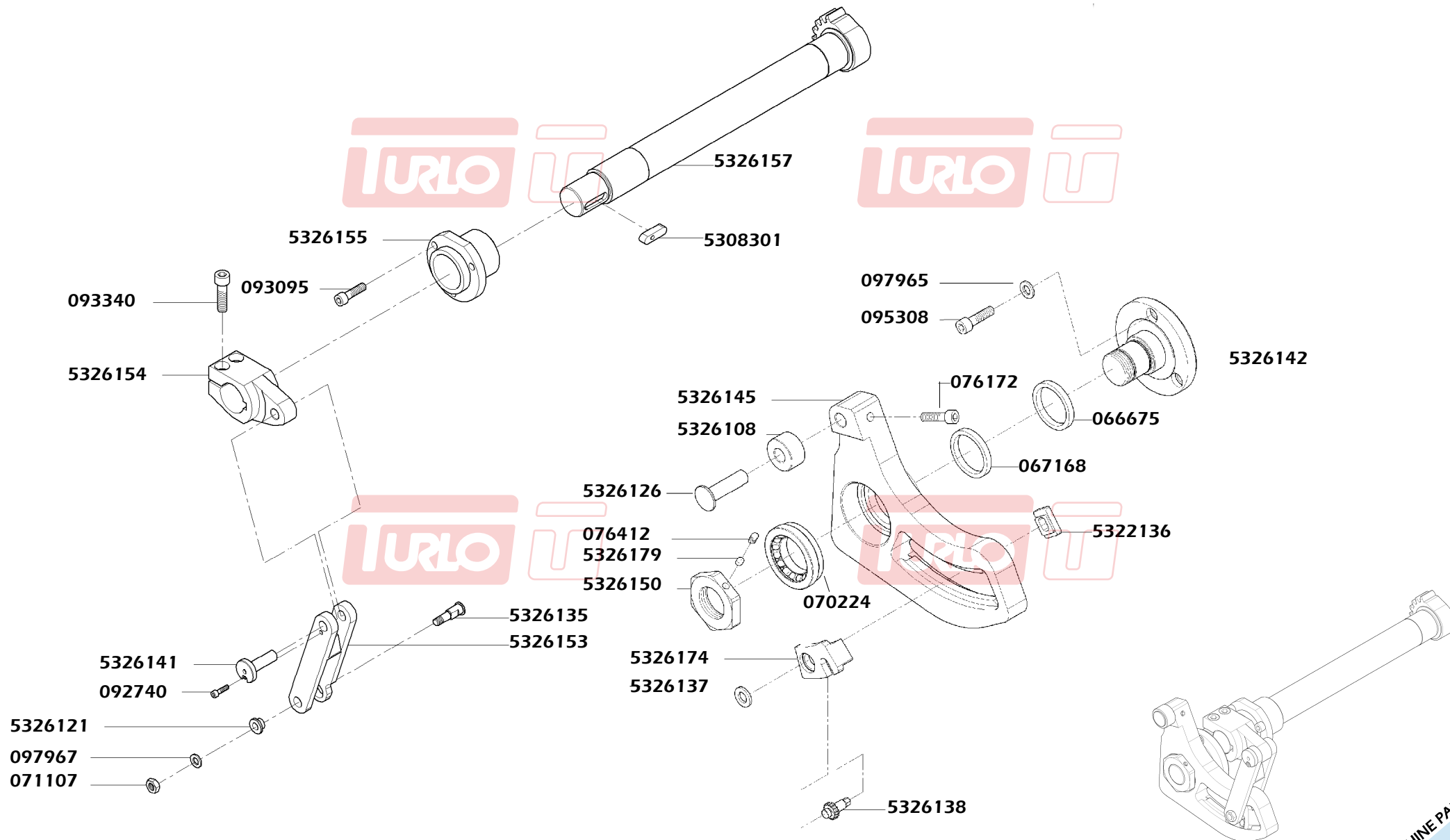


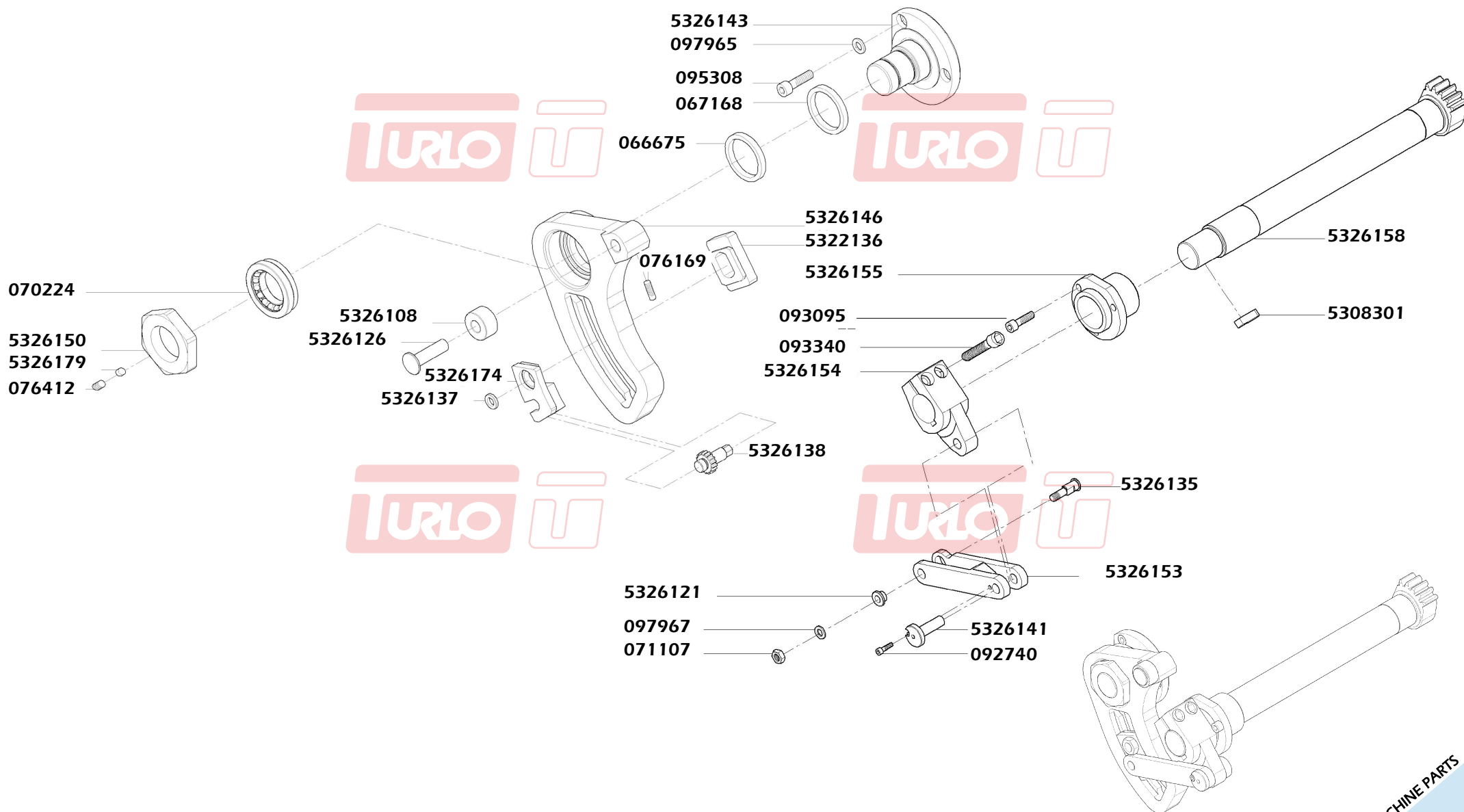


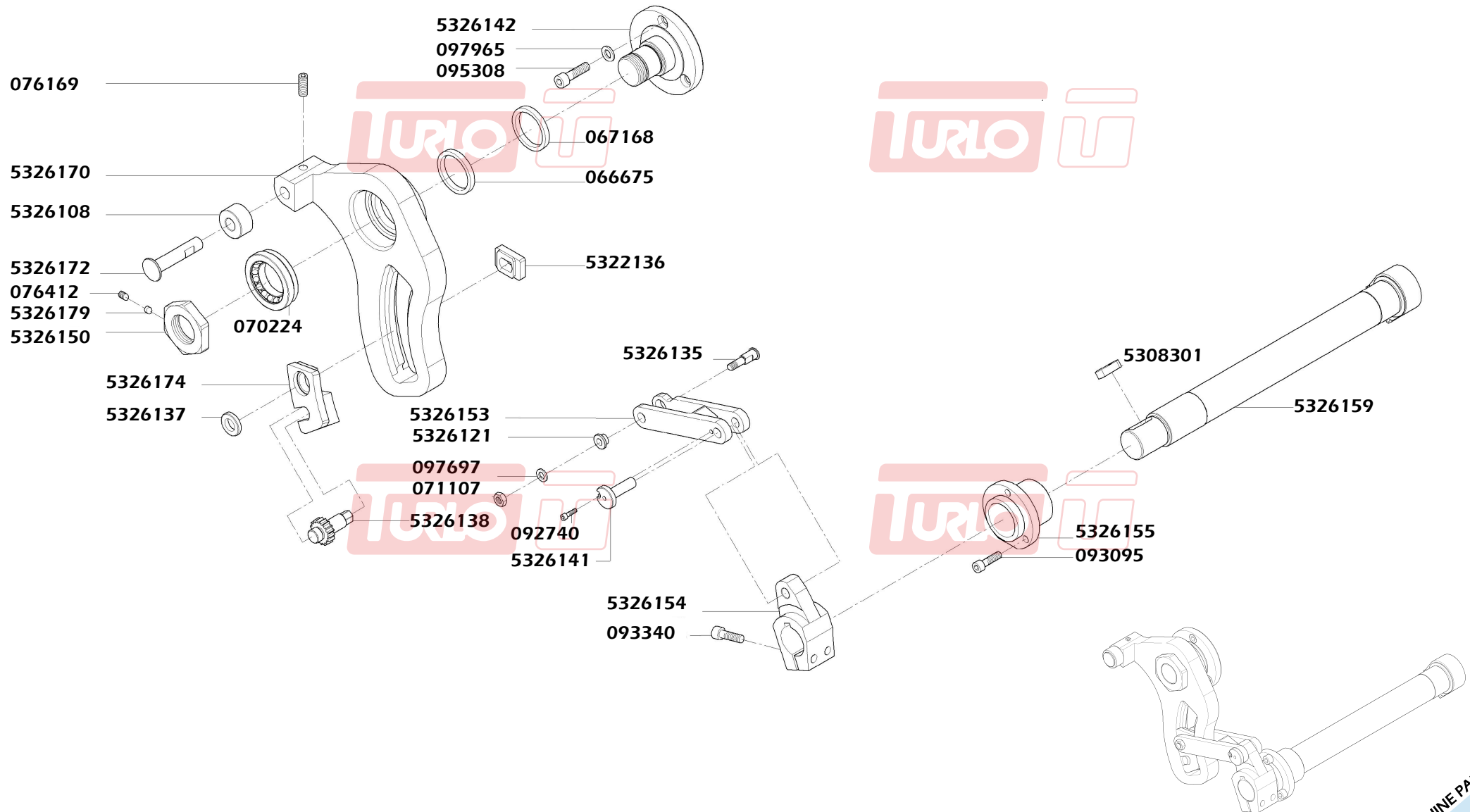


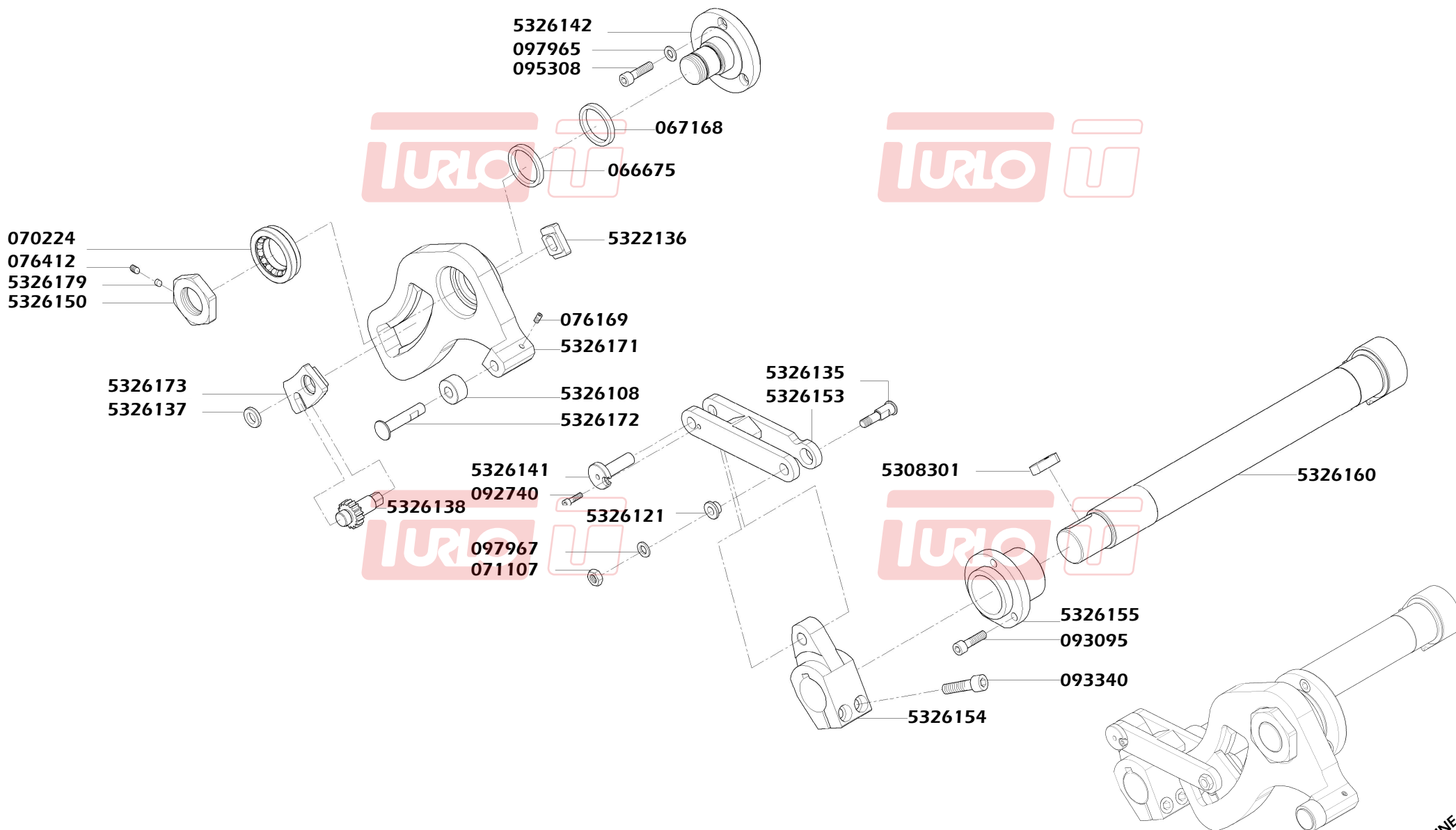


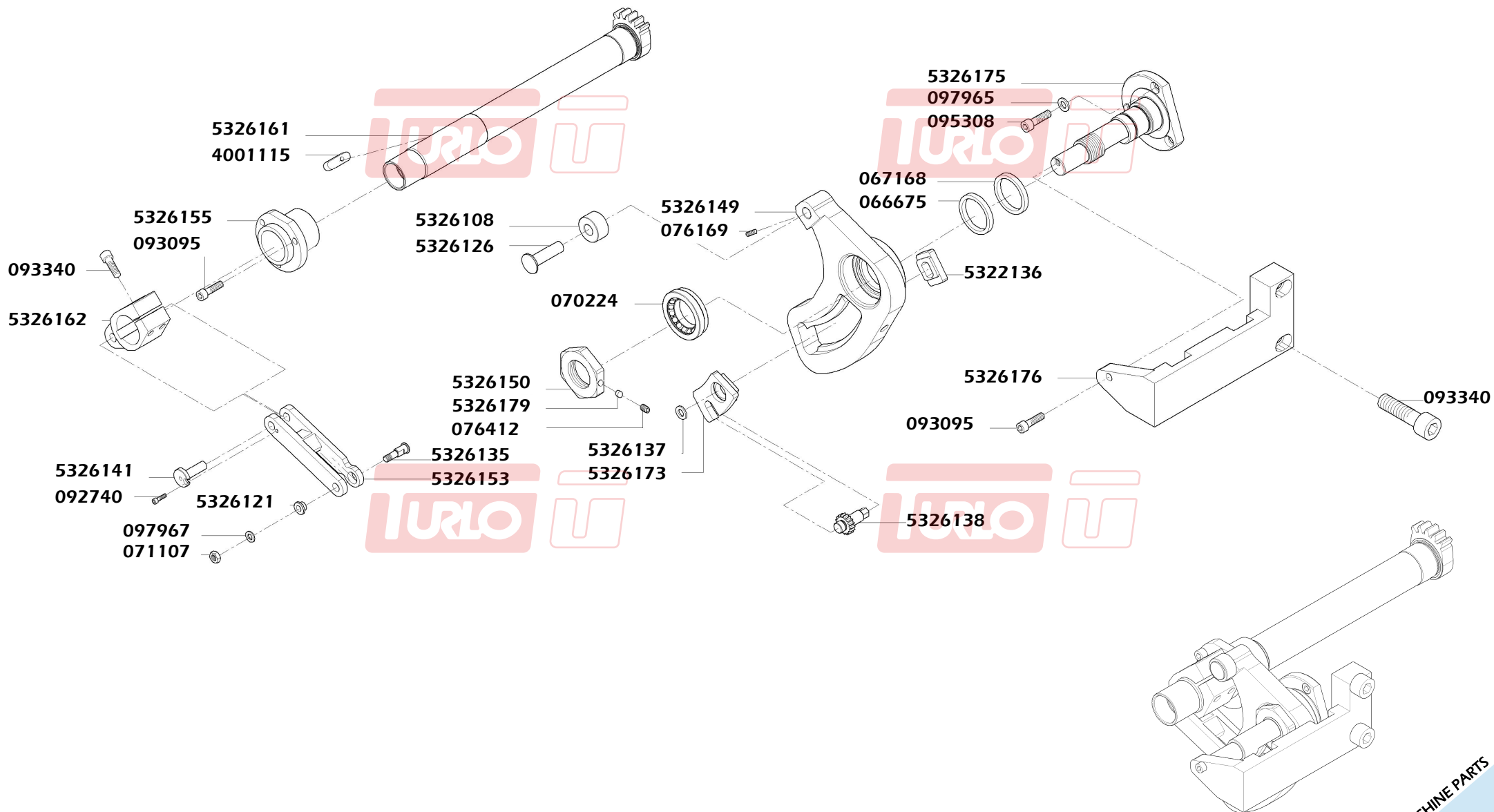




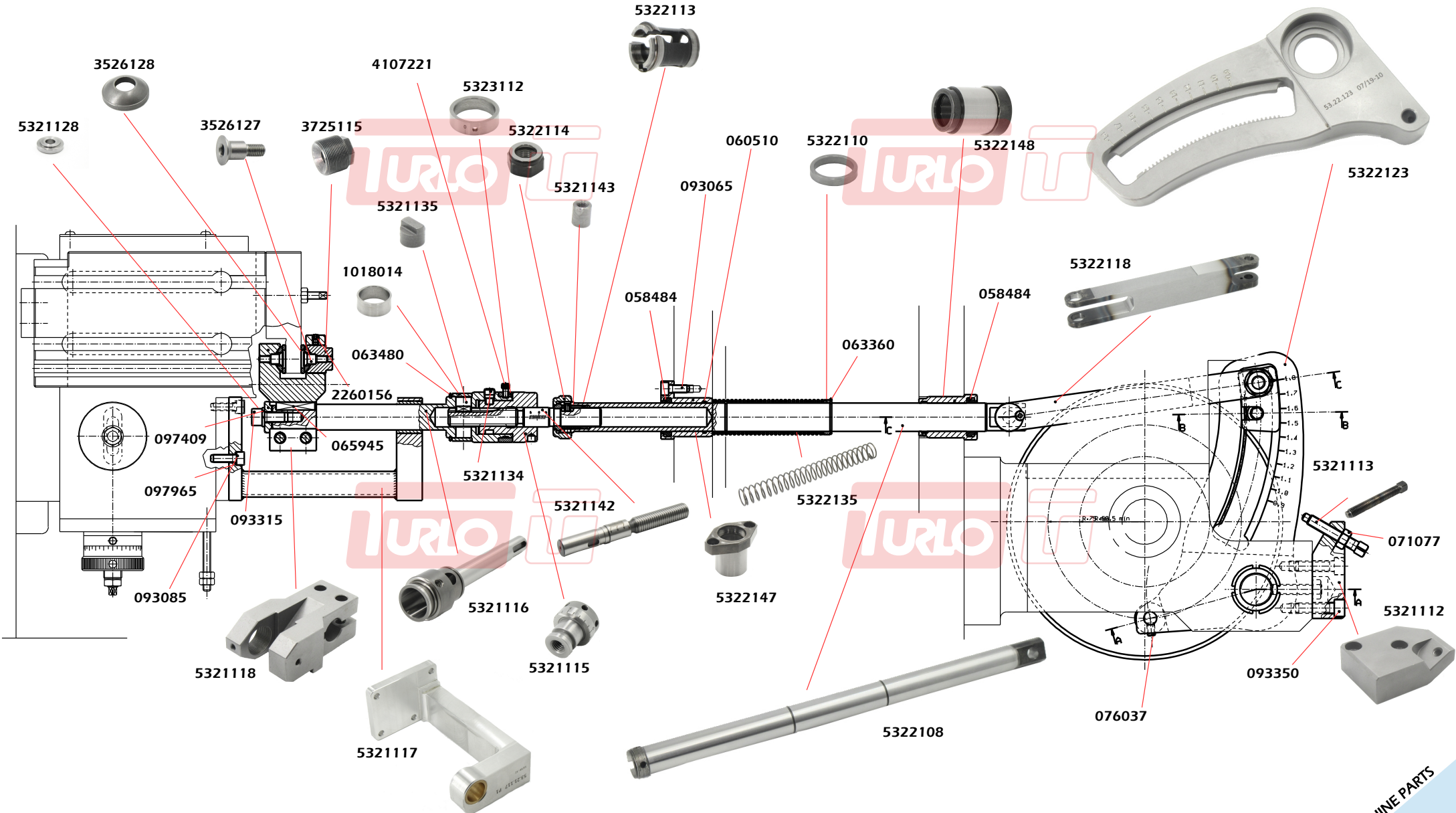


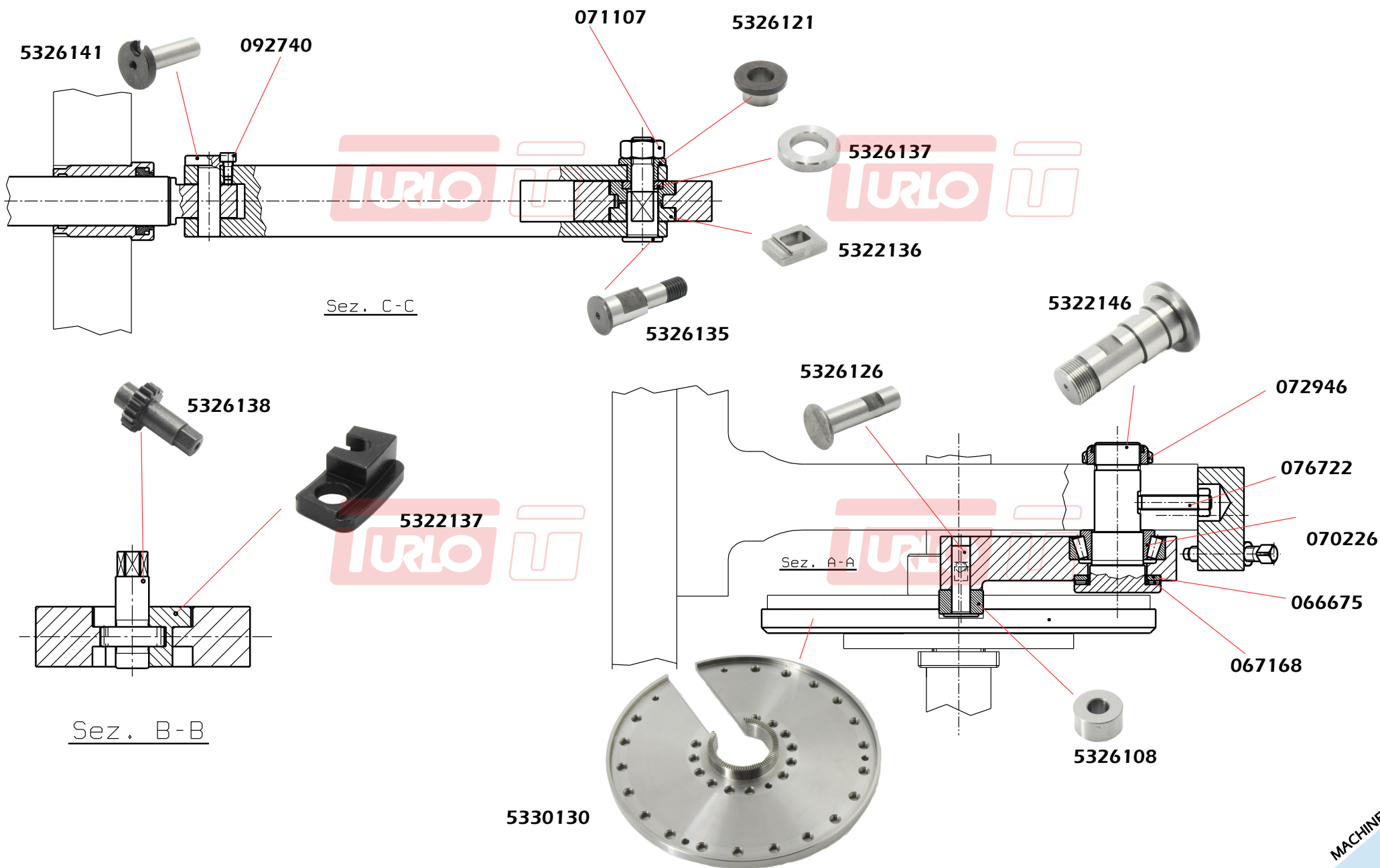


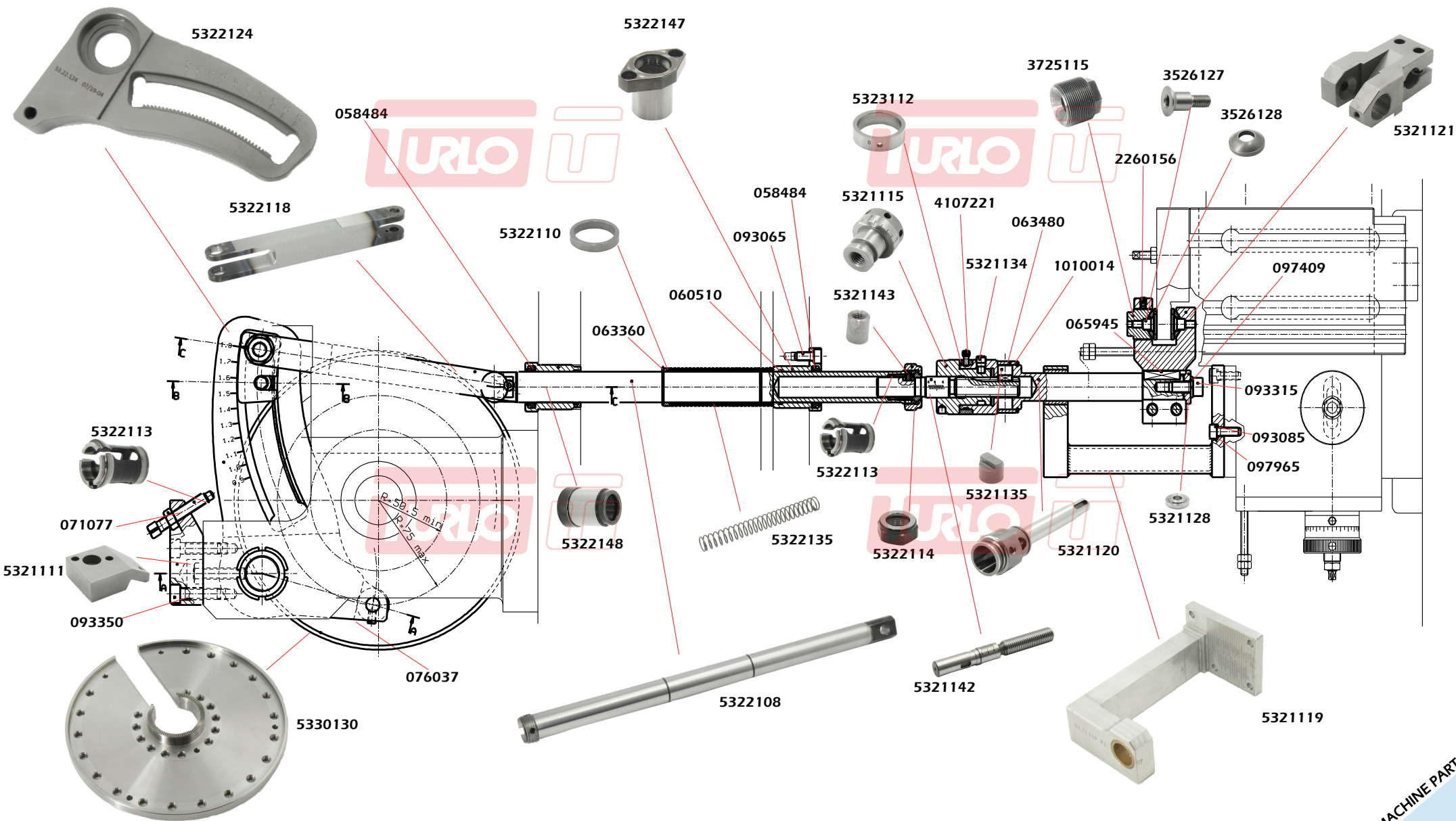


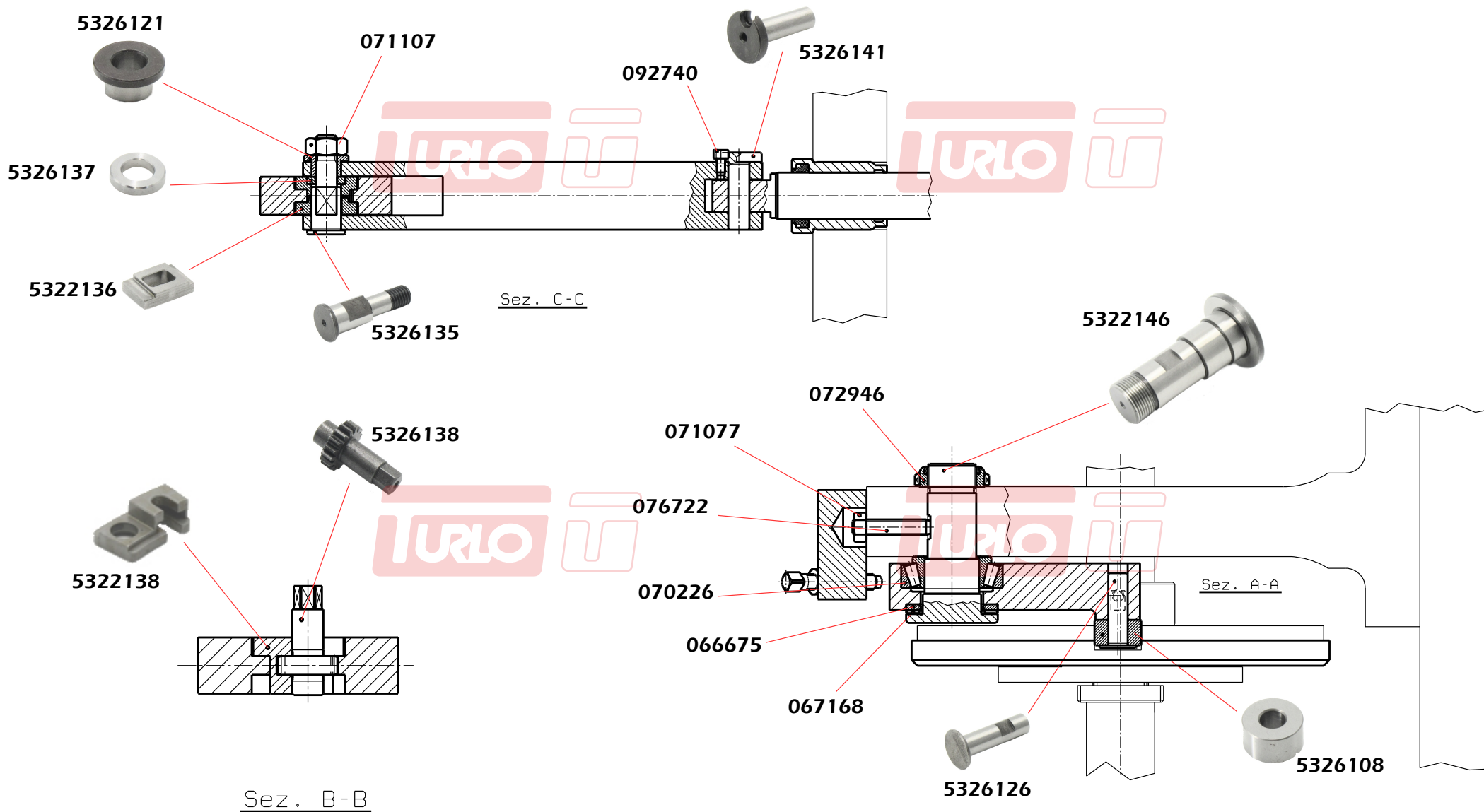


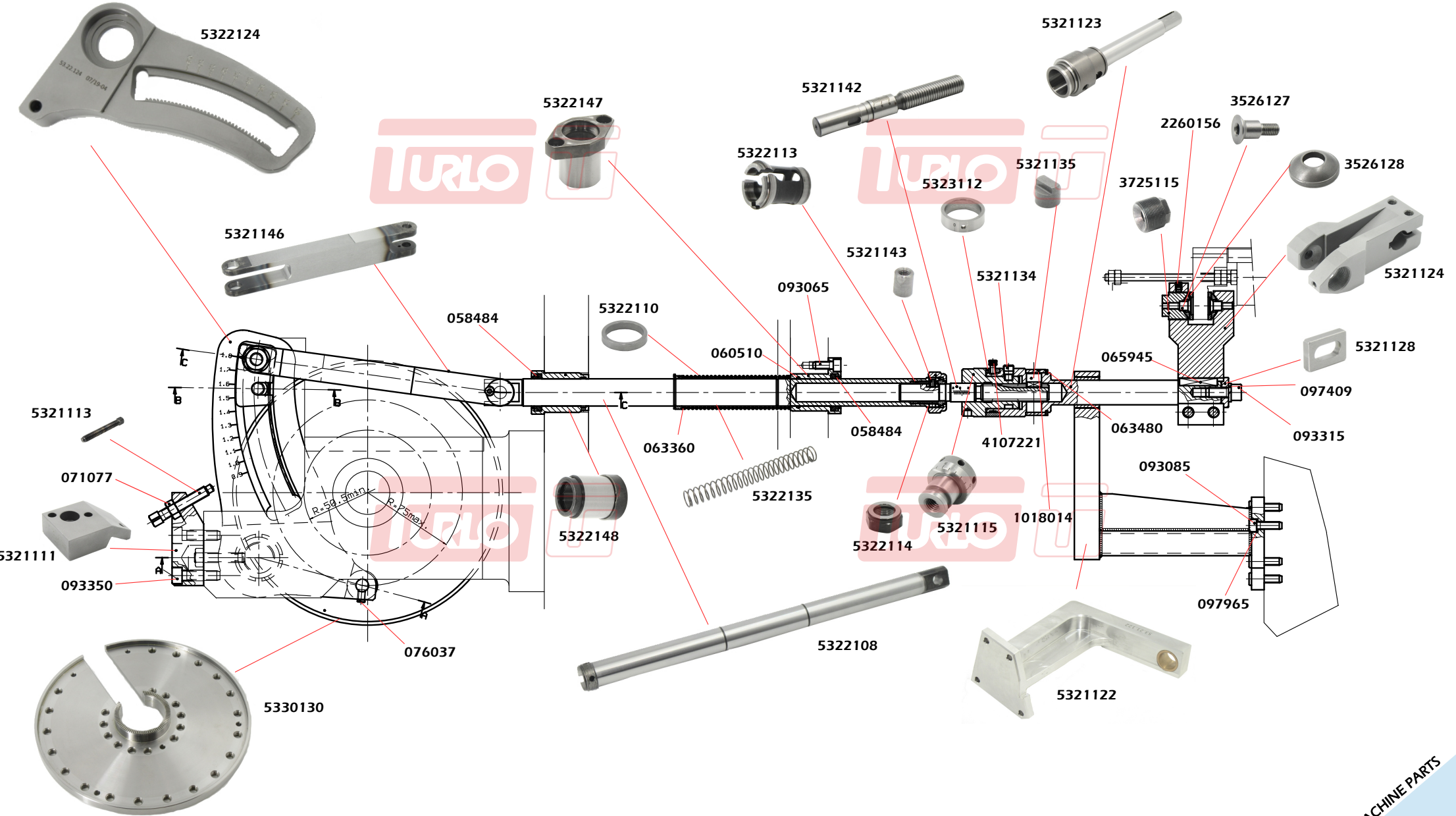


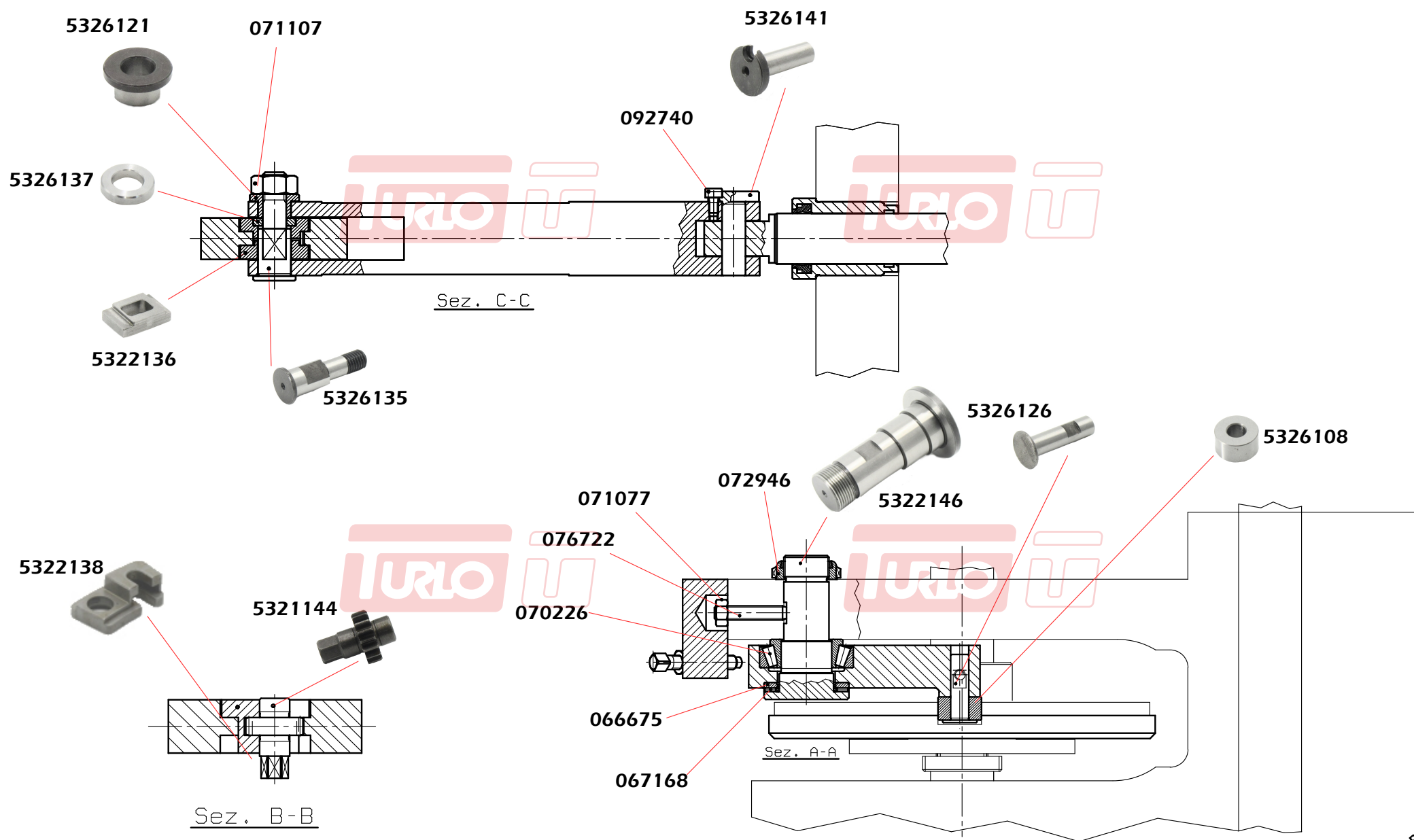


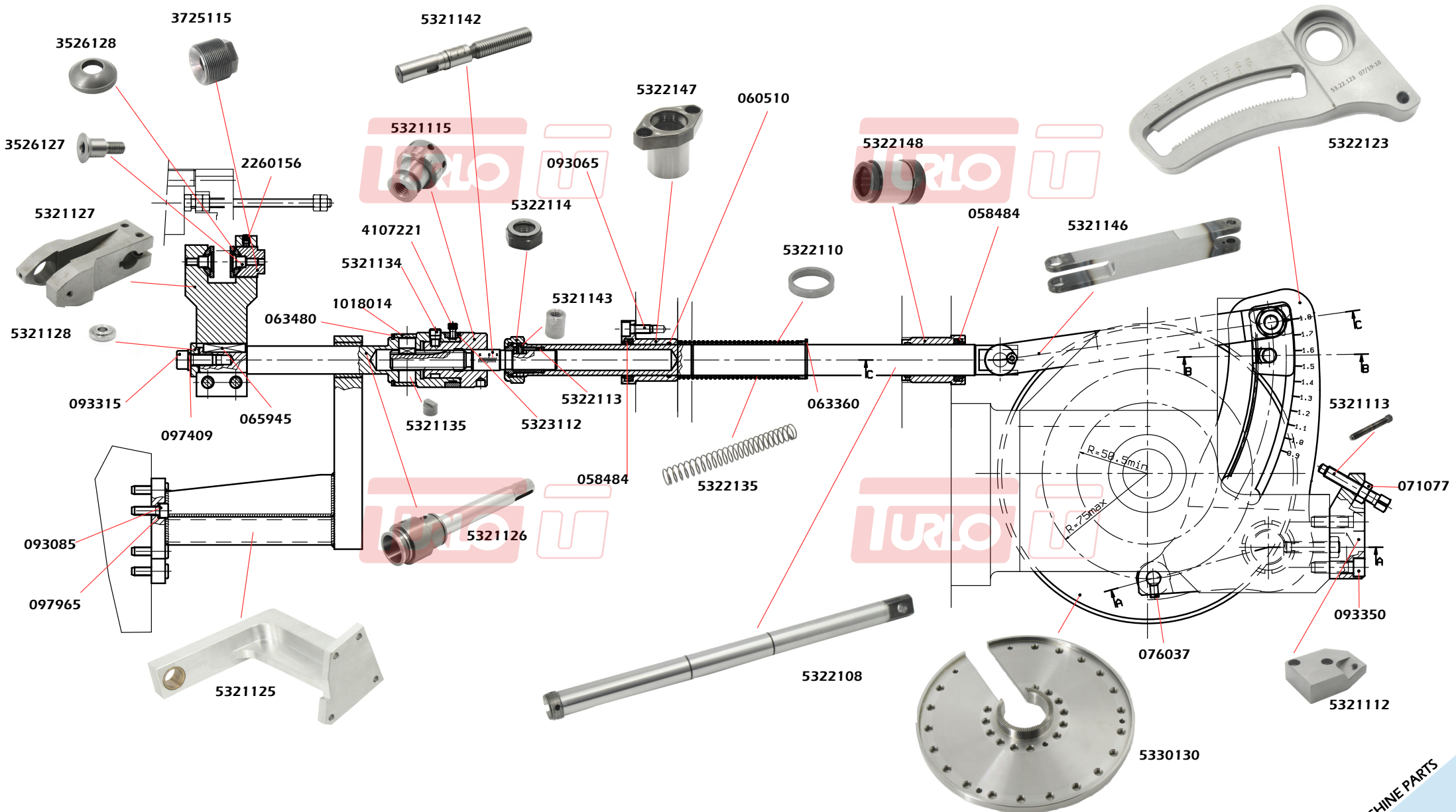


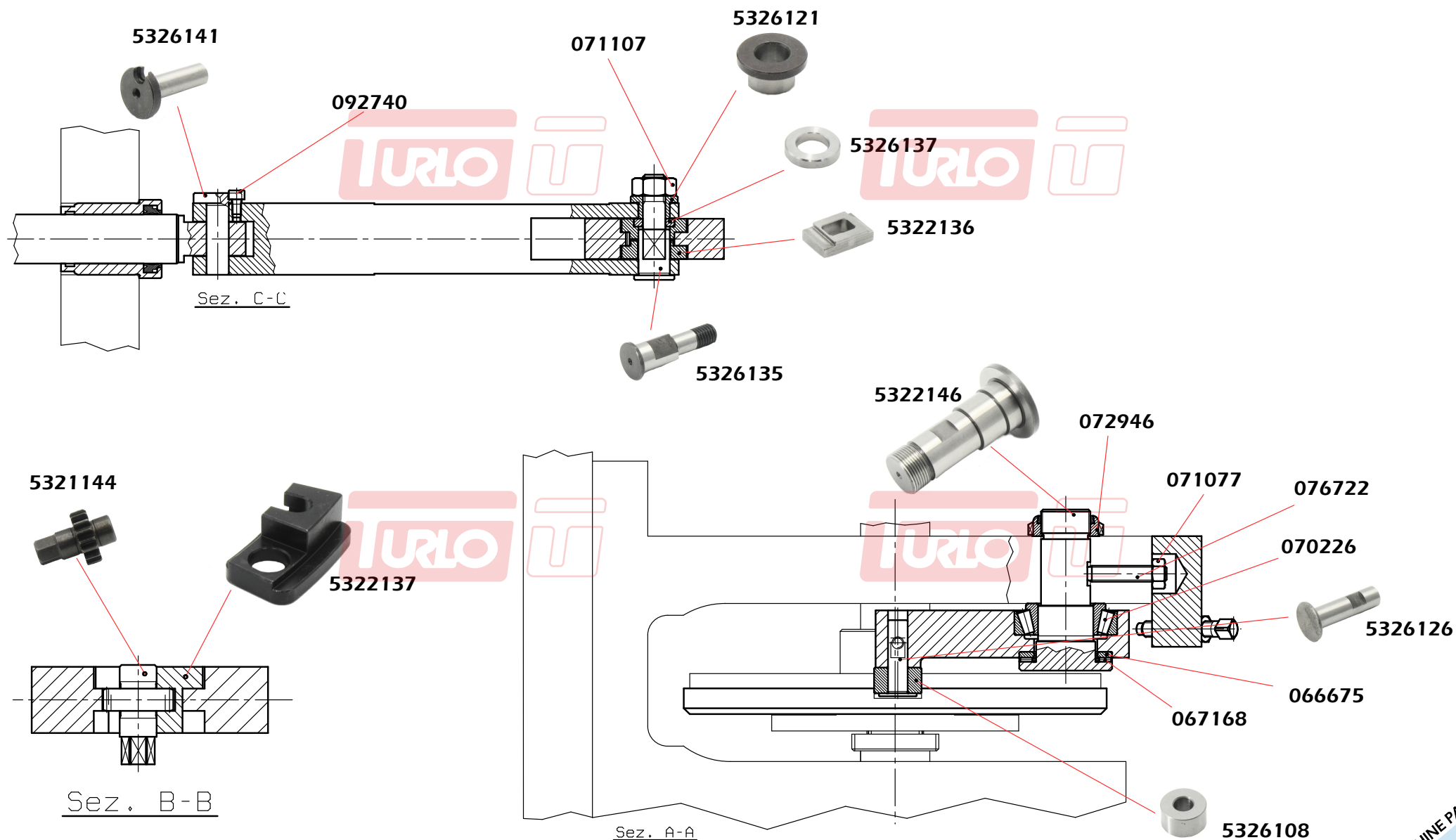




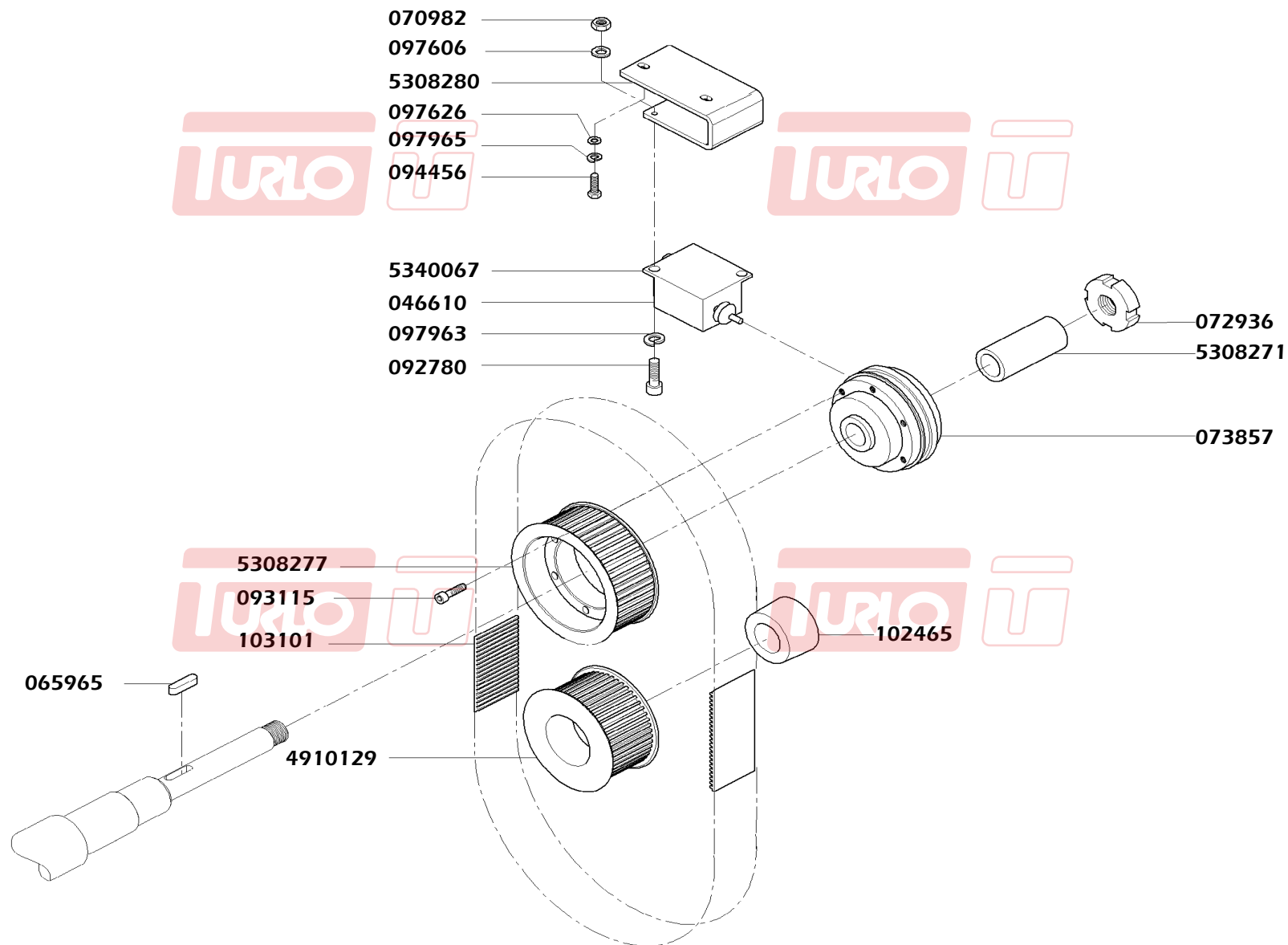


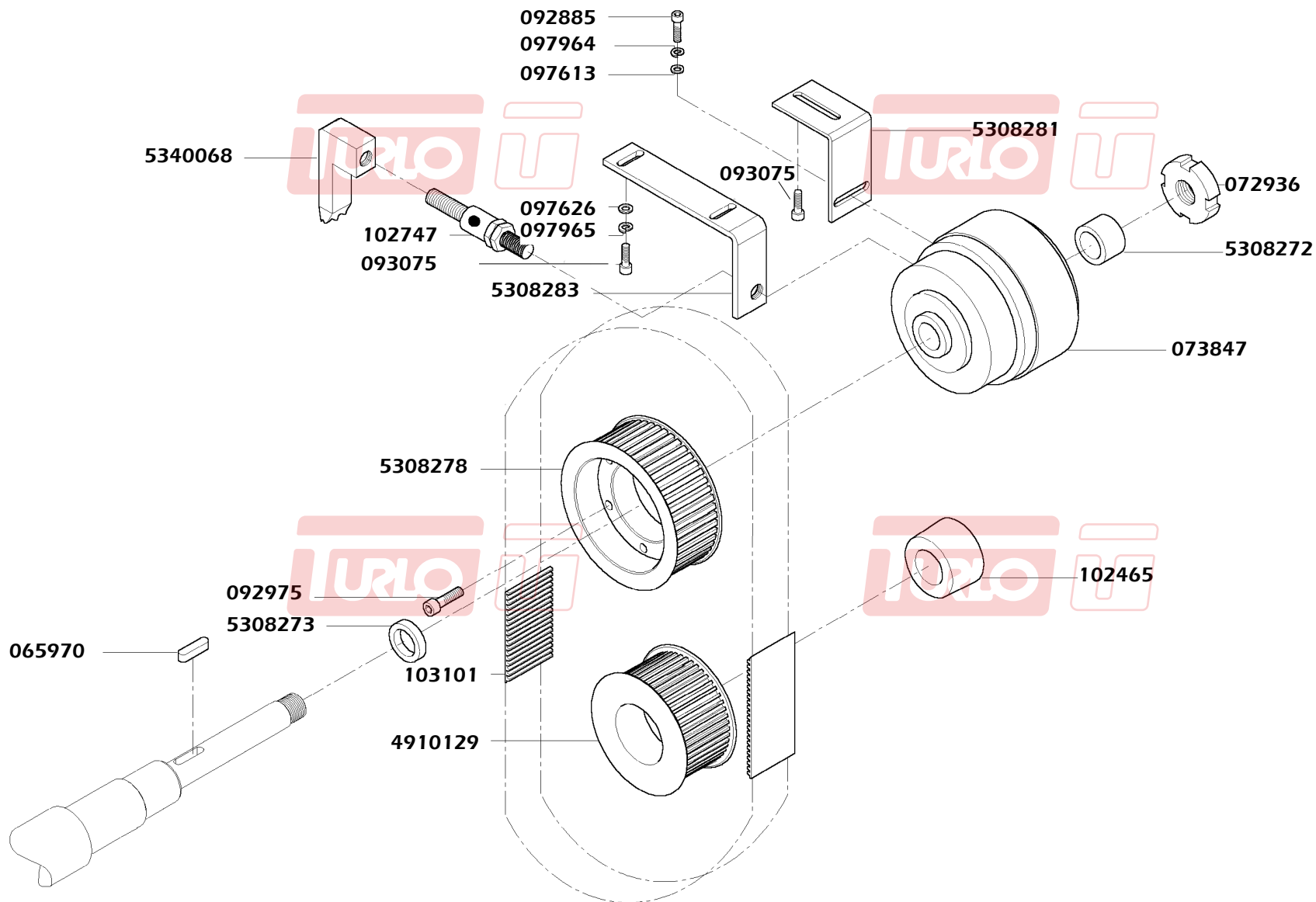








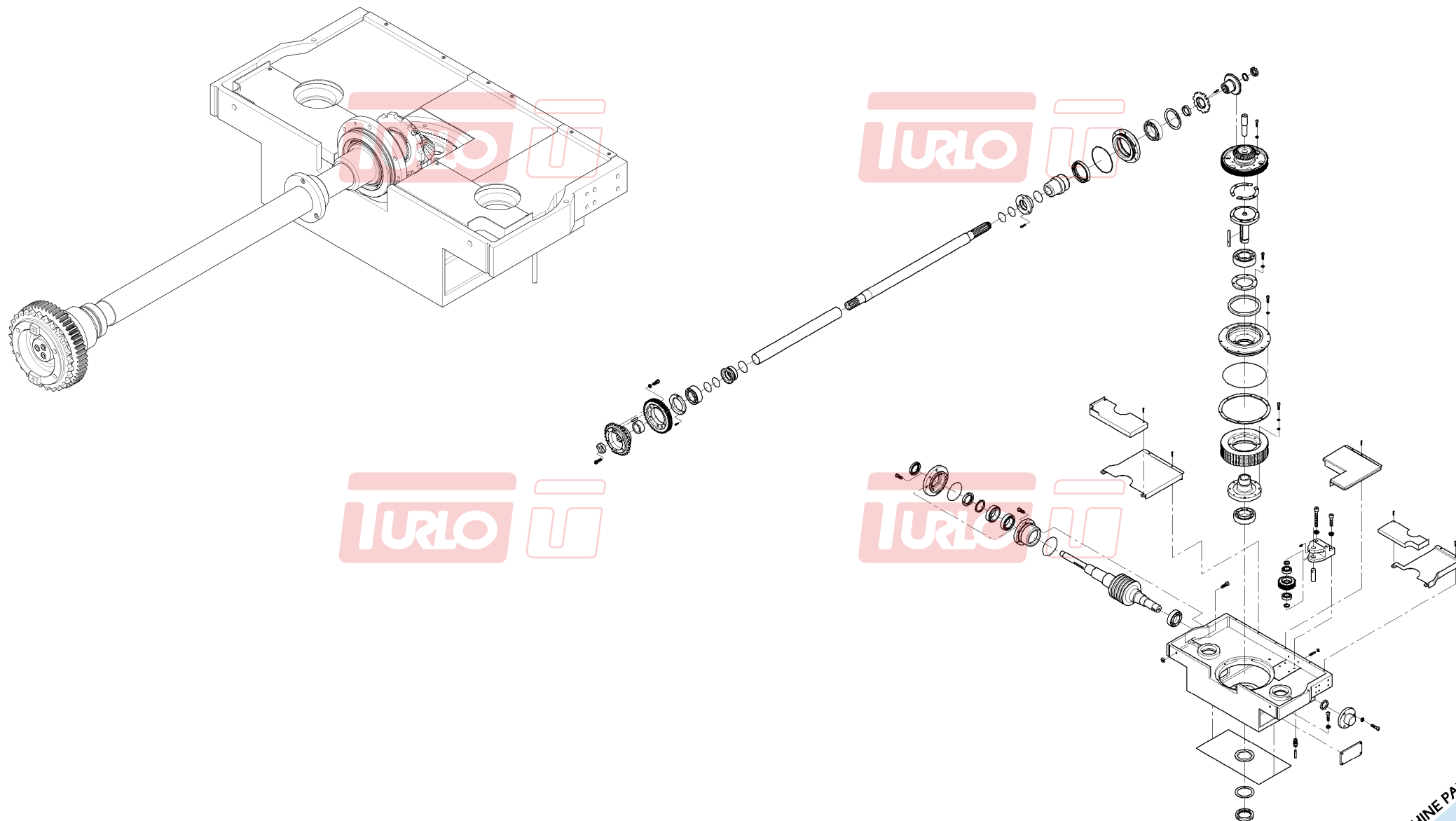


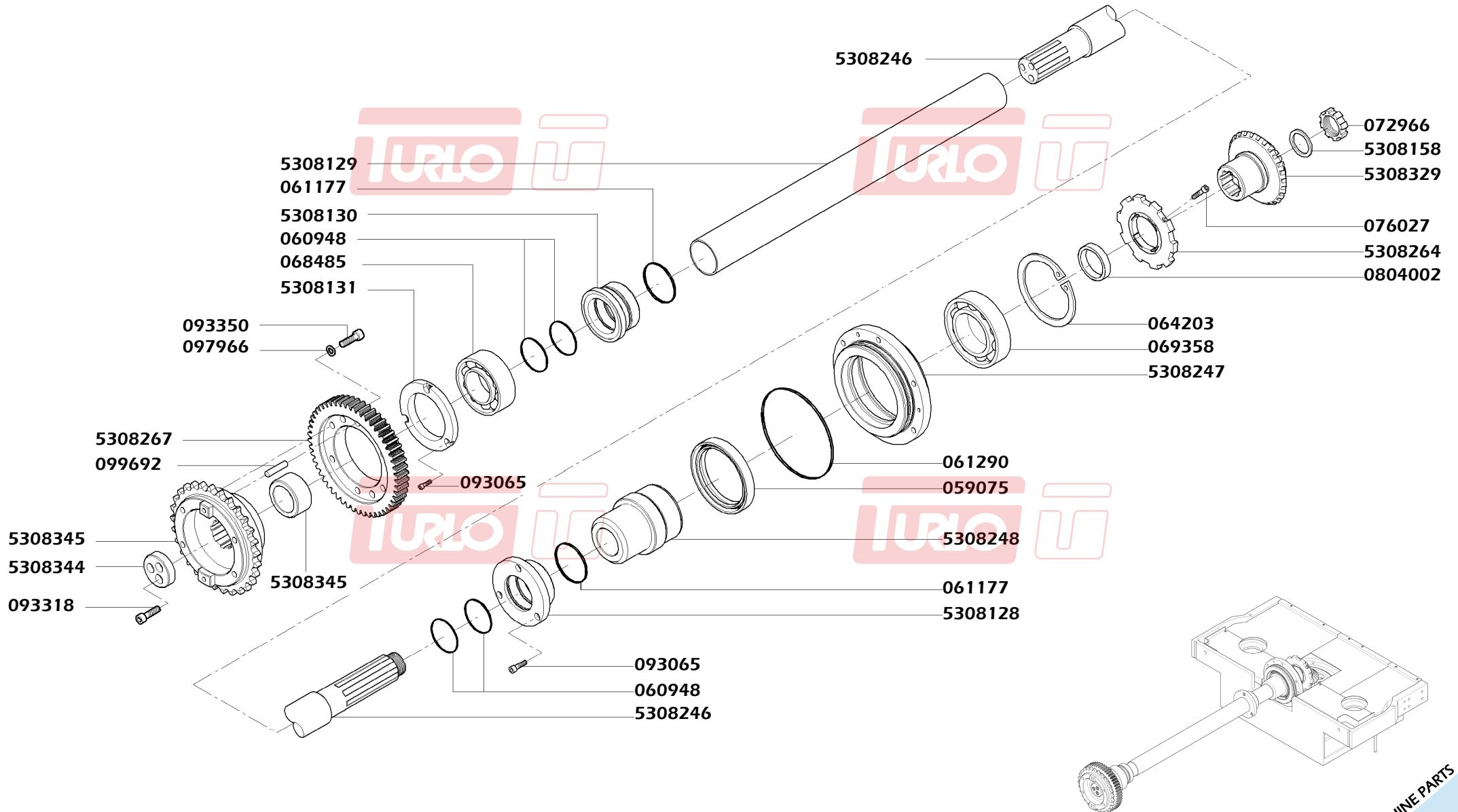


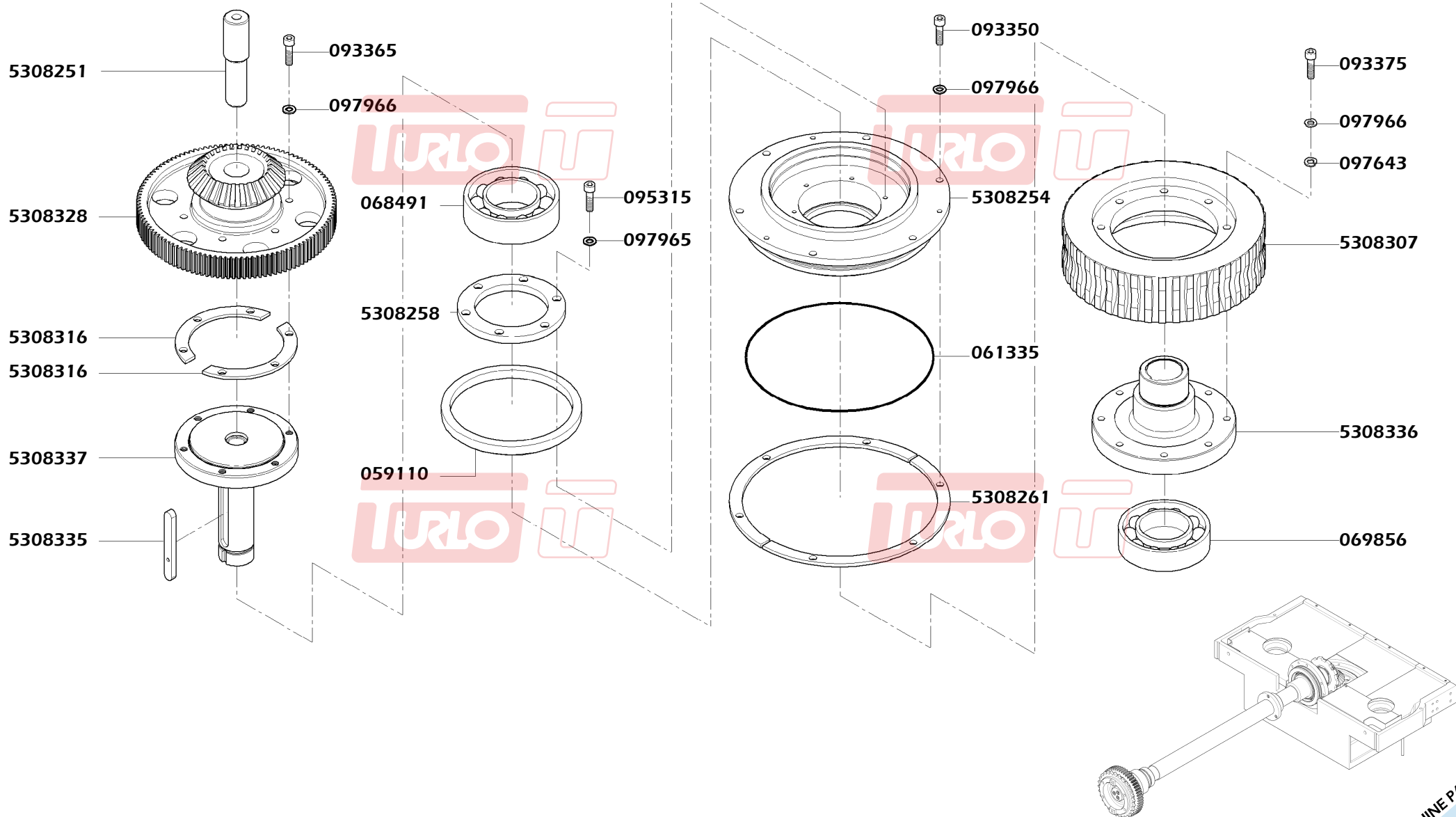


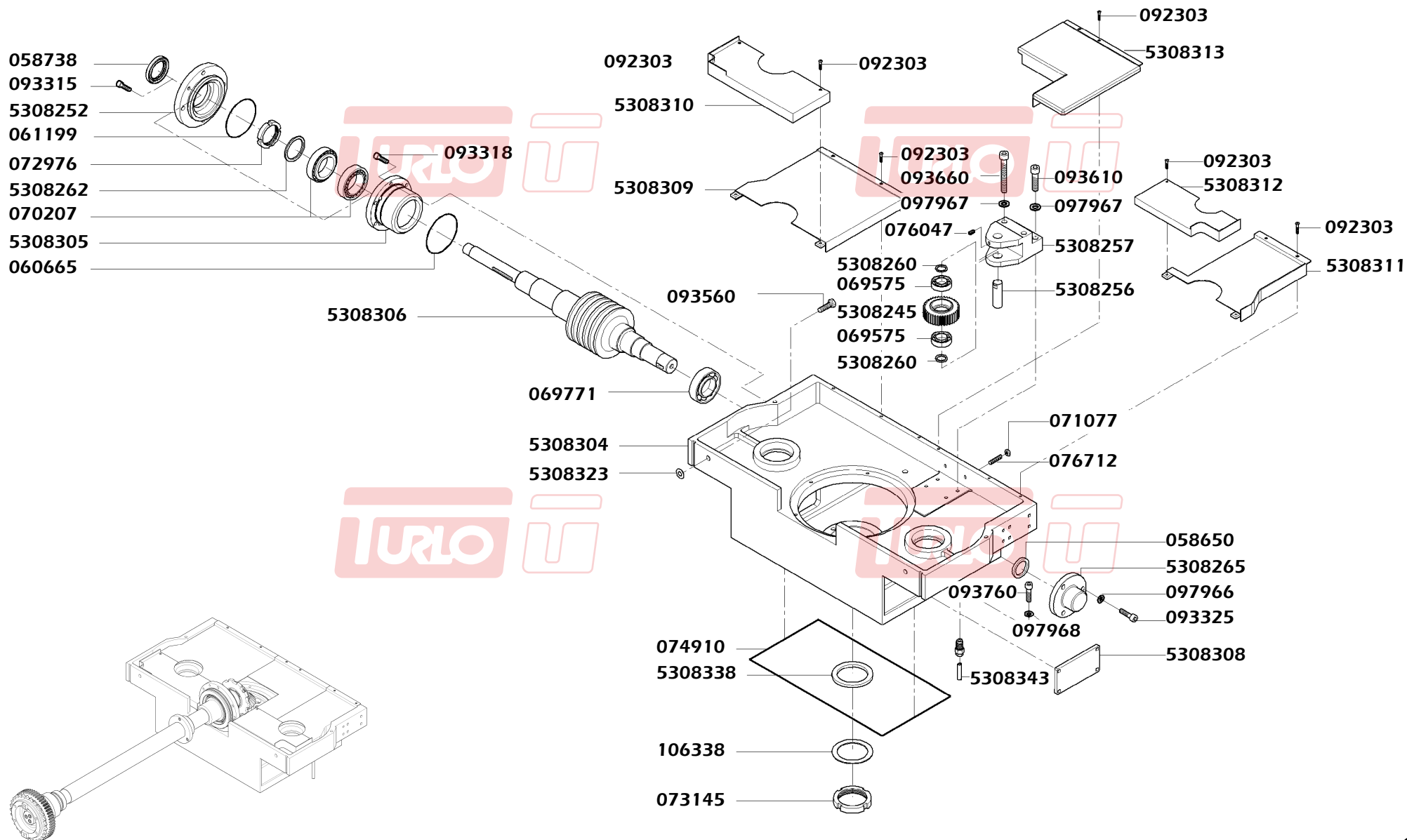
# GILDEMEISTER GM16-6

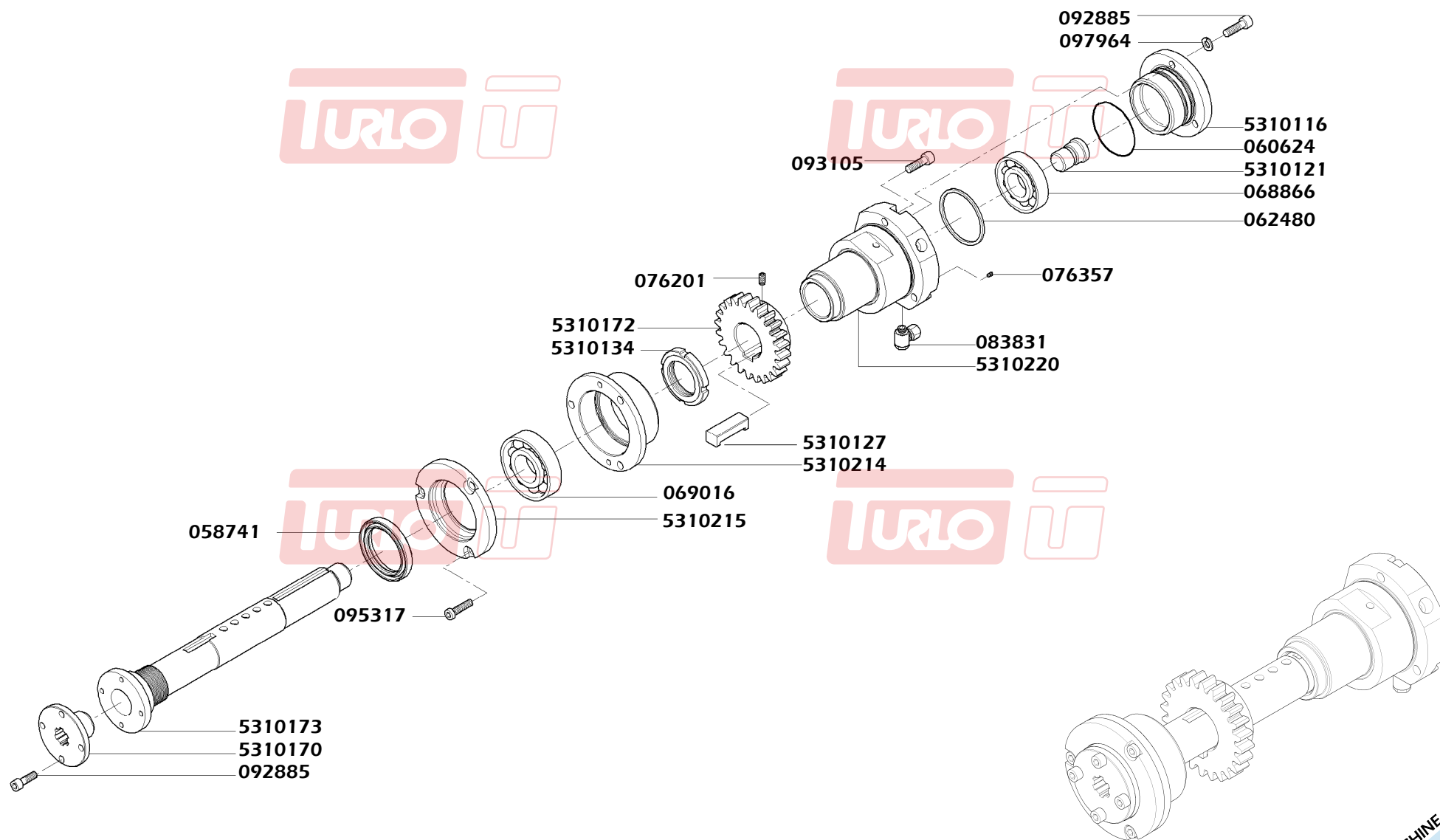
5308019 Comando alberi portacamme / *Camshaft control*

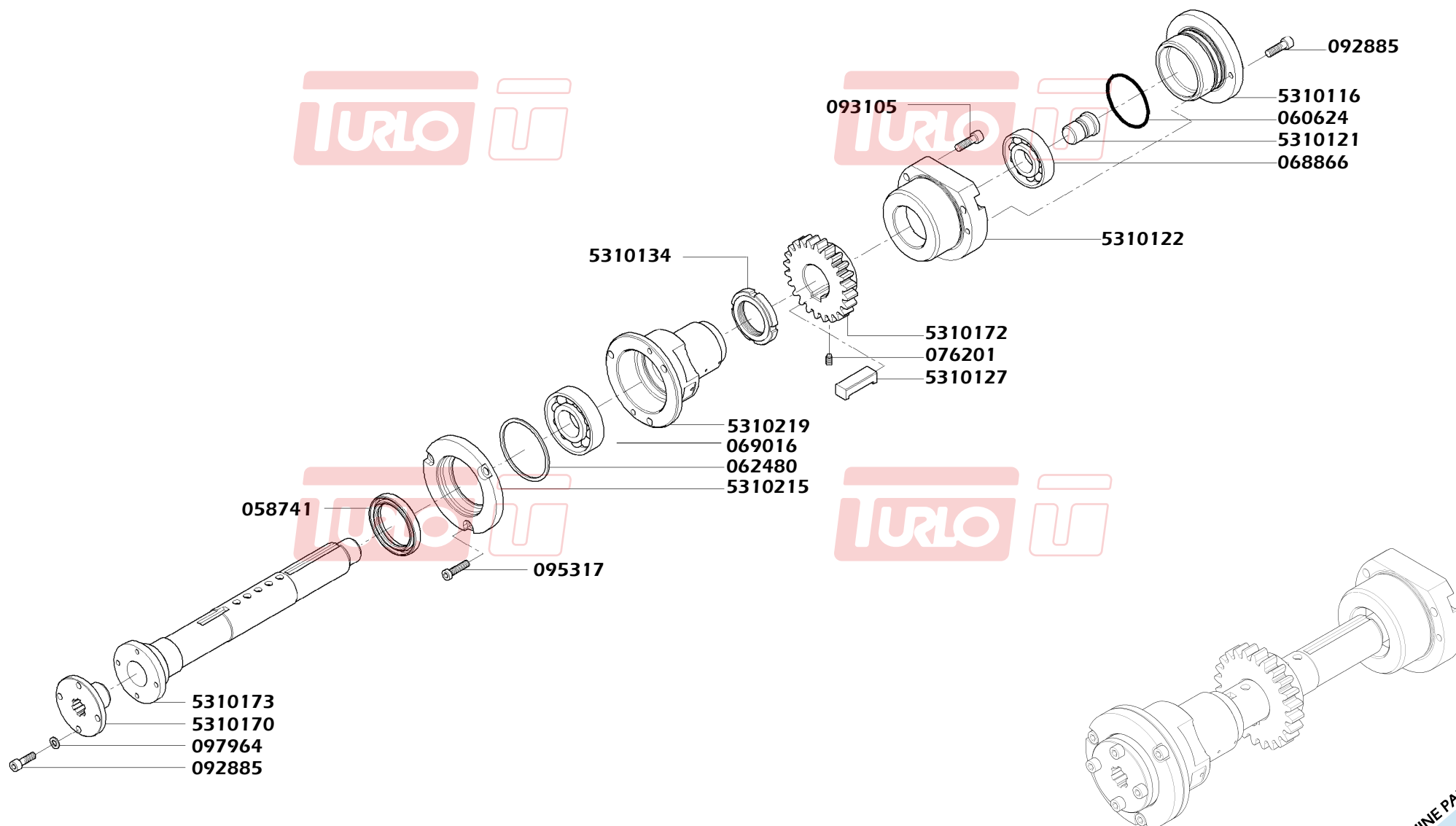




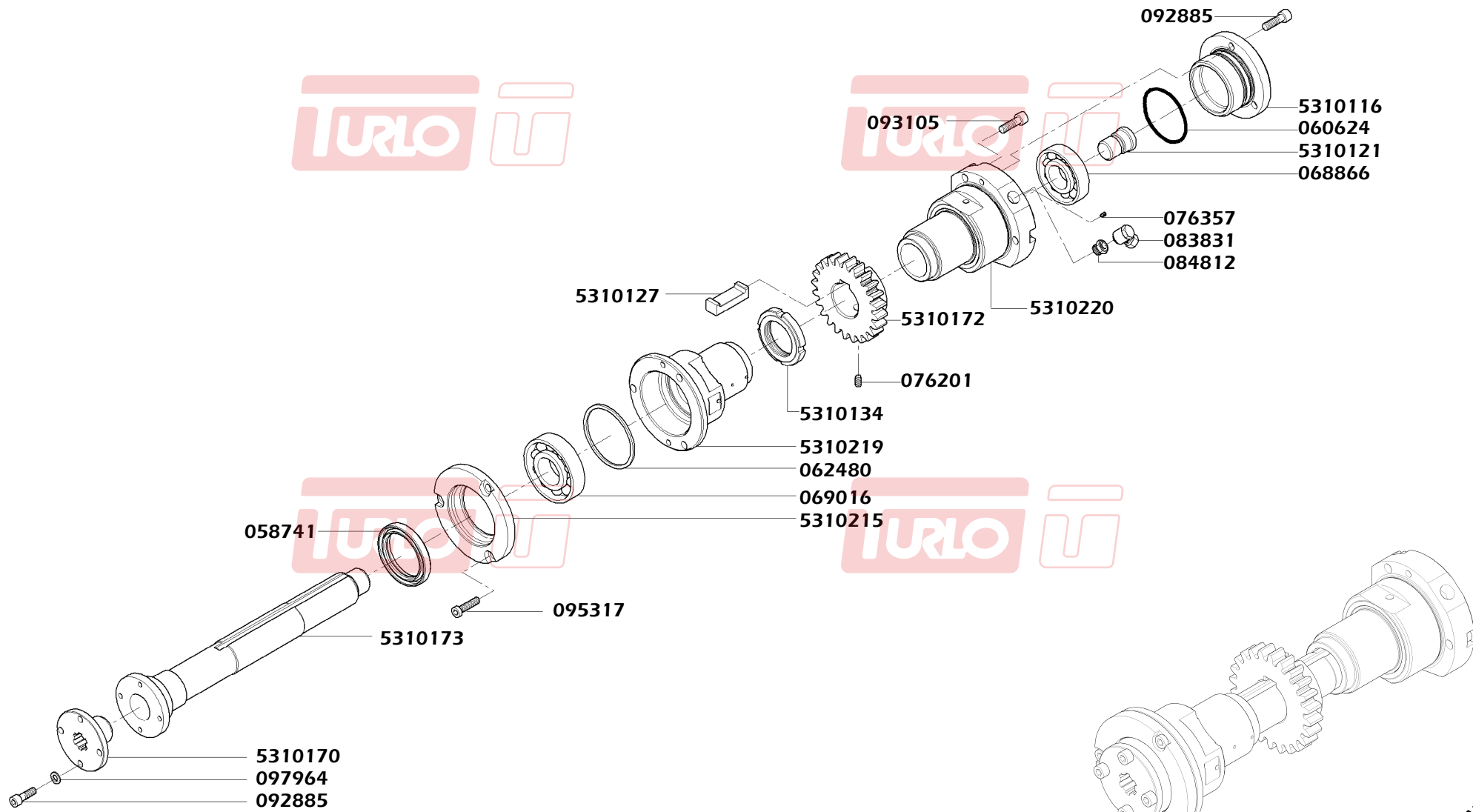


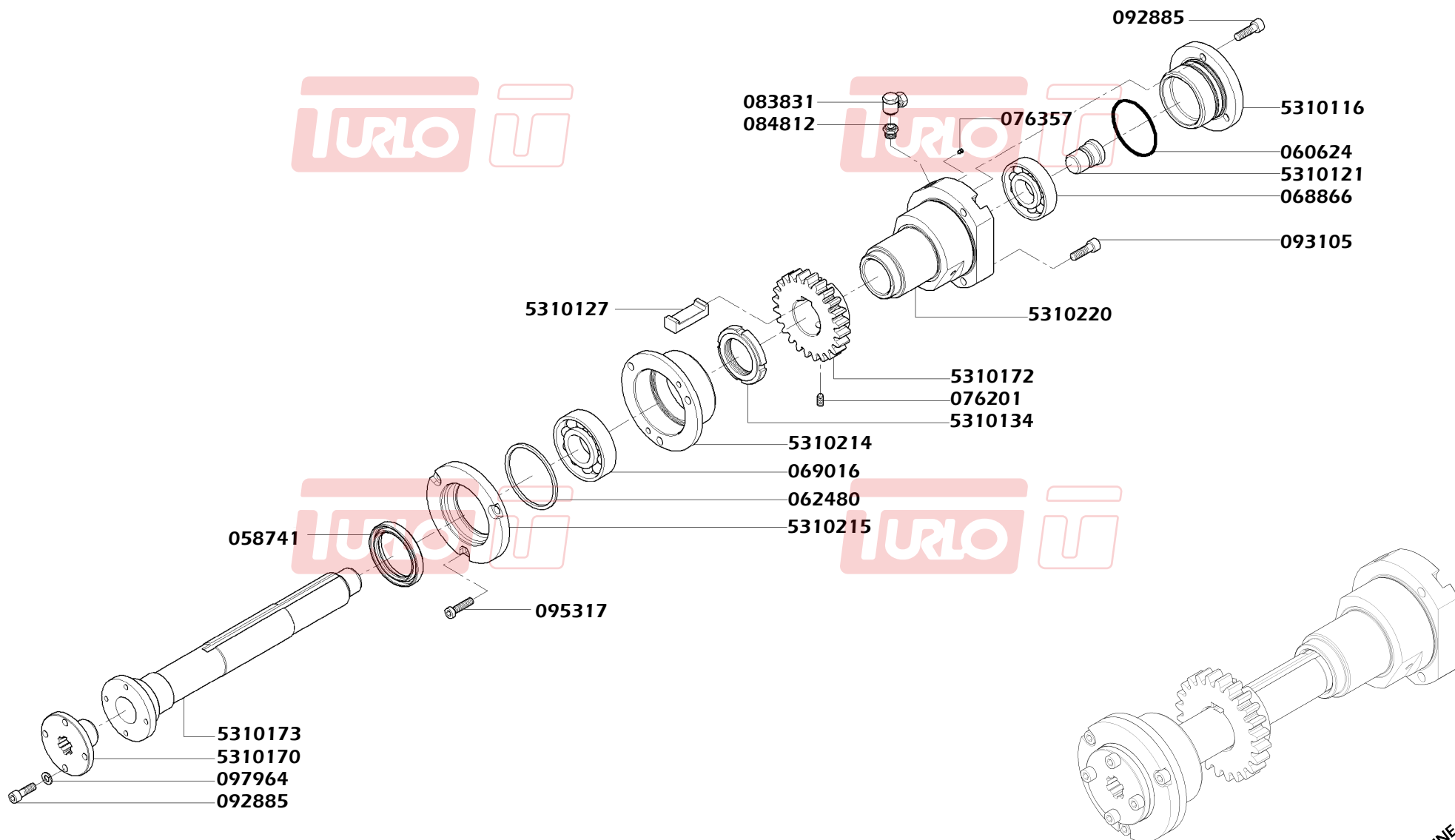


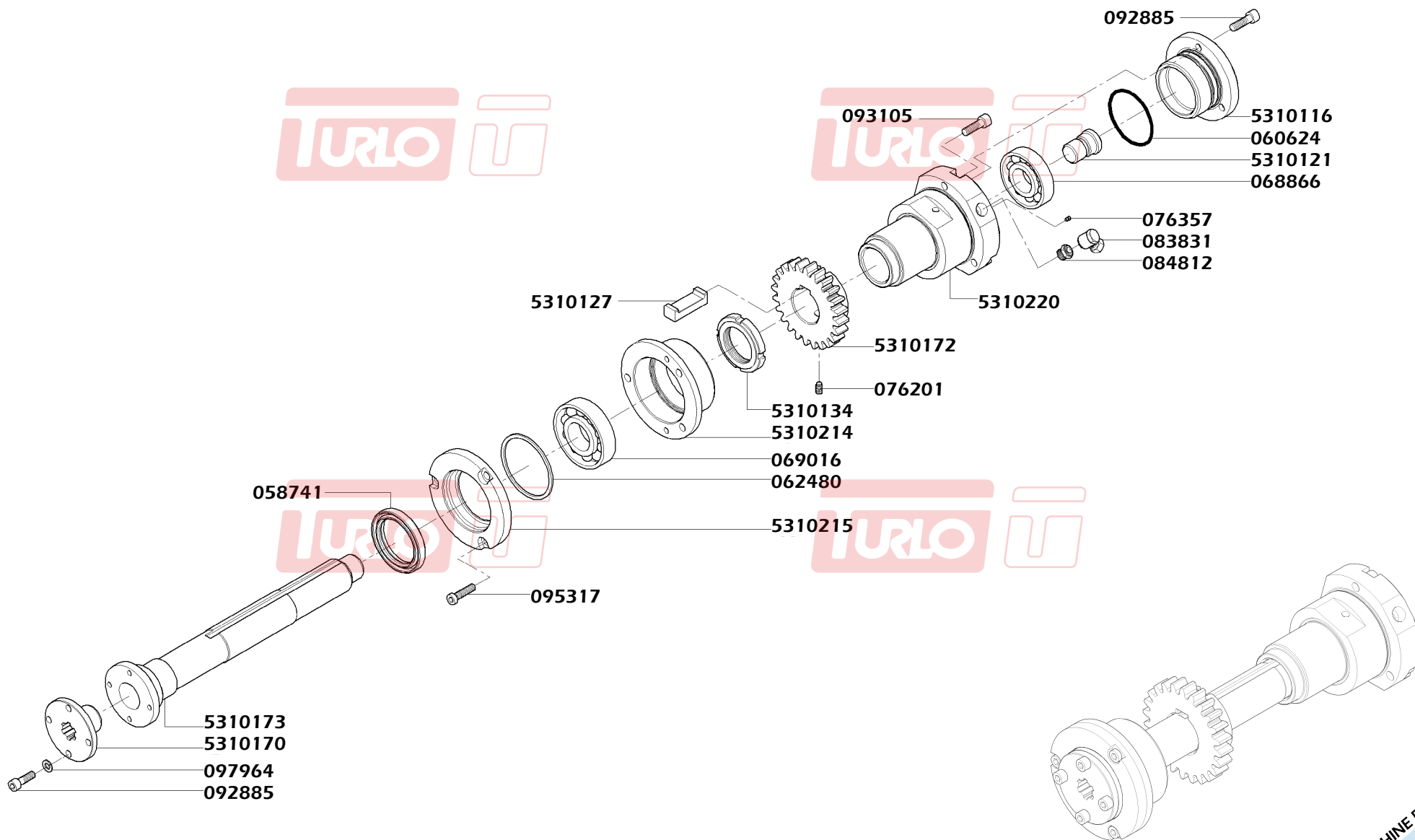


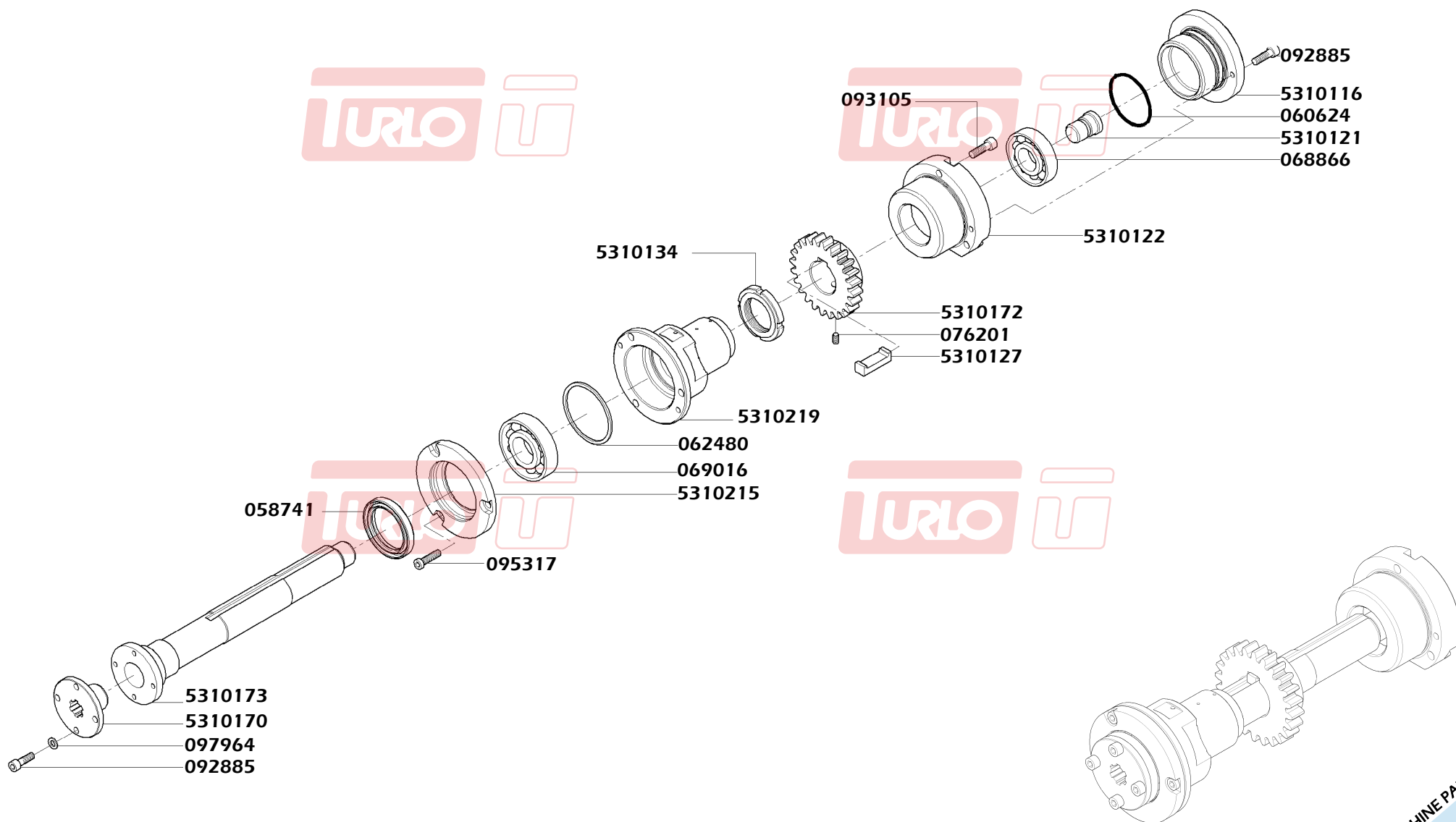


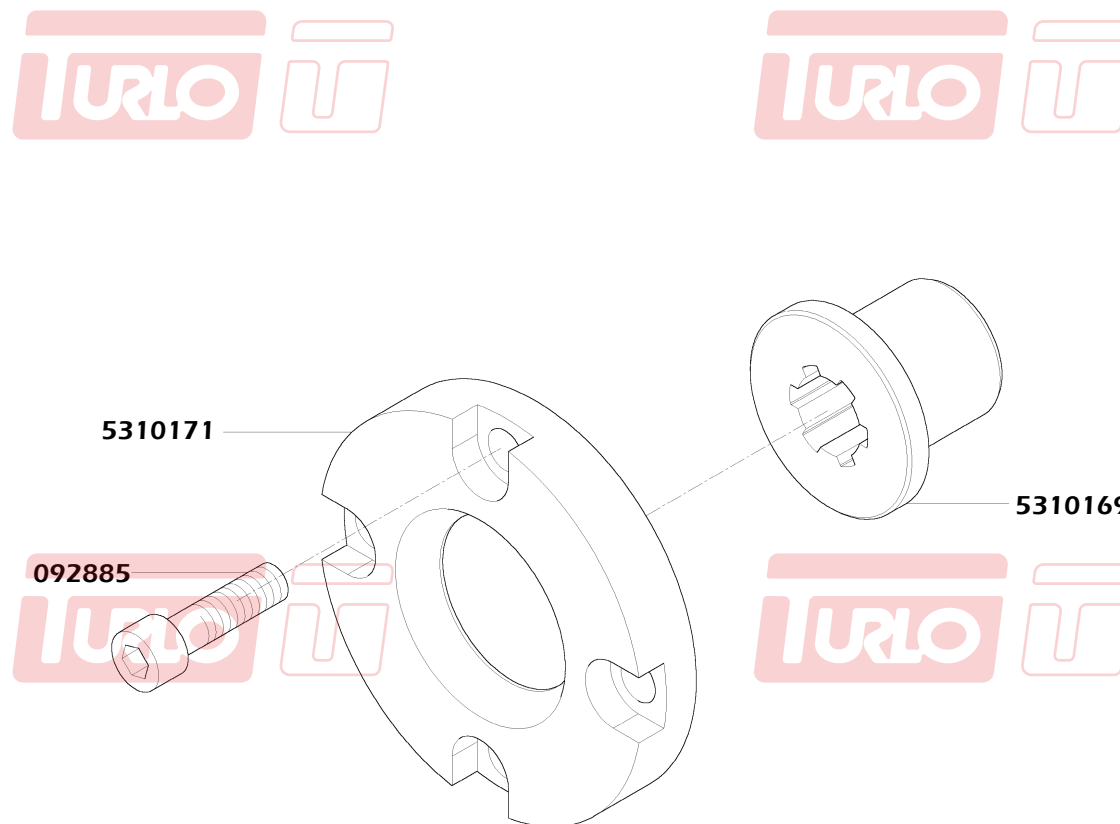


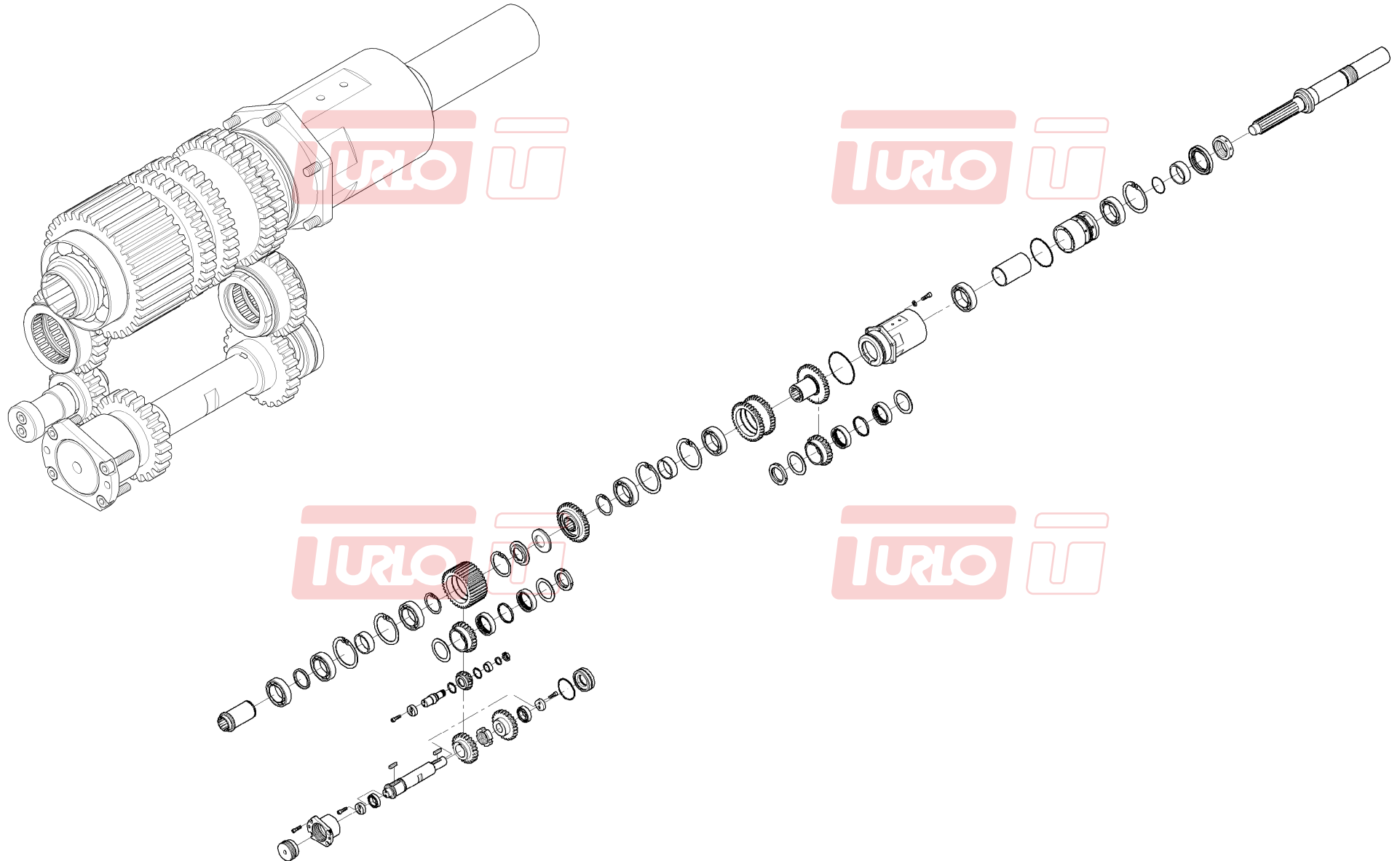








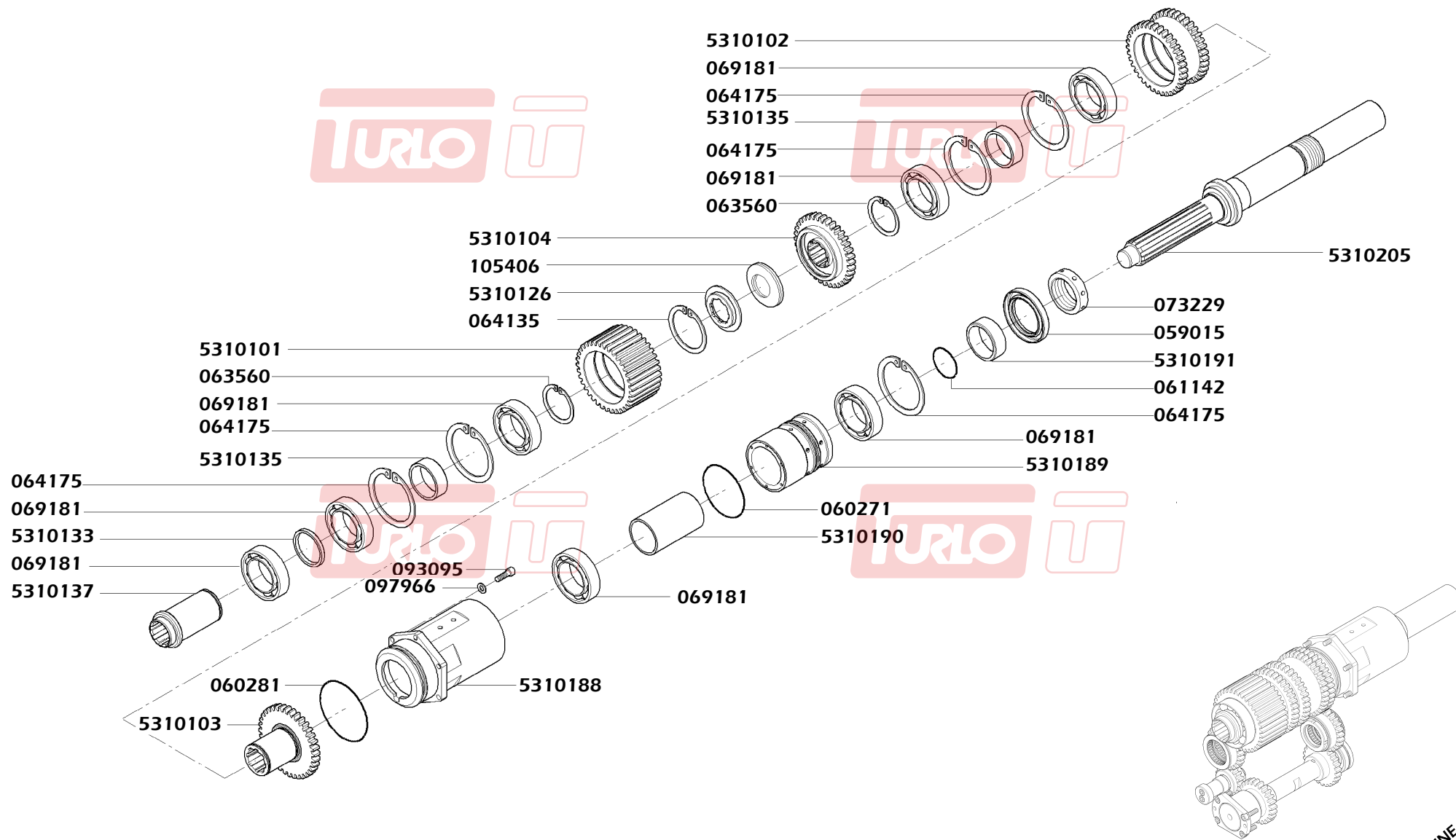


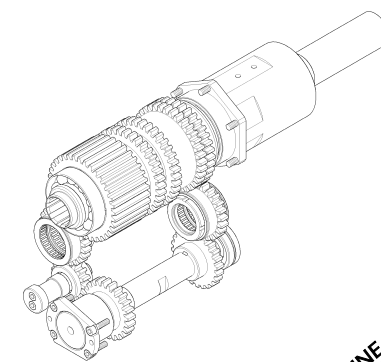
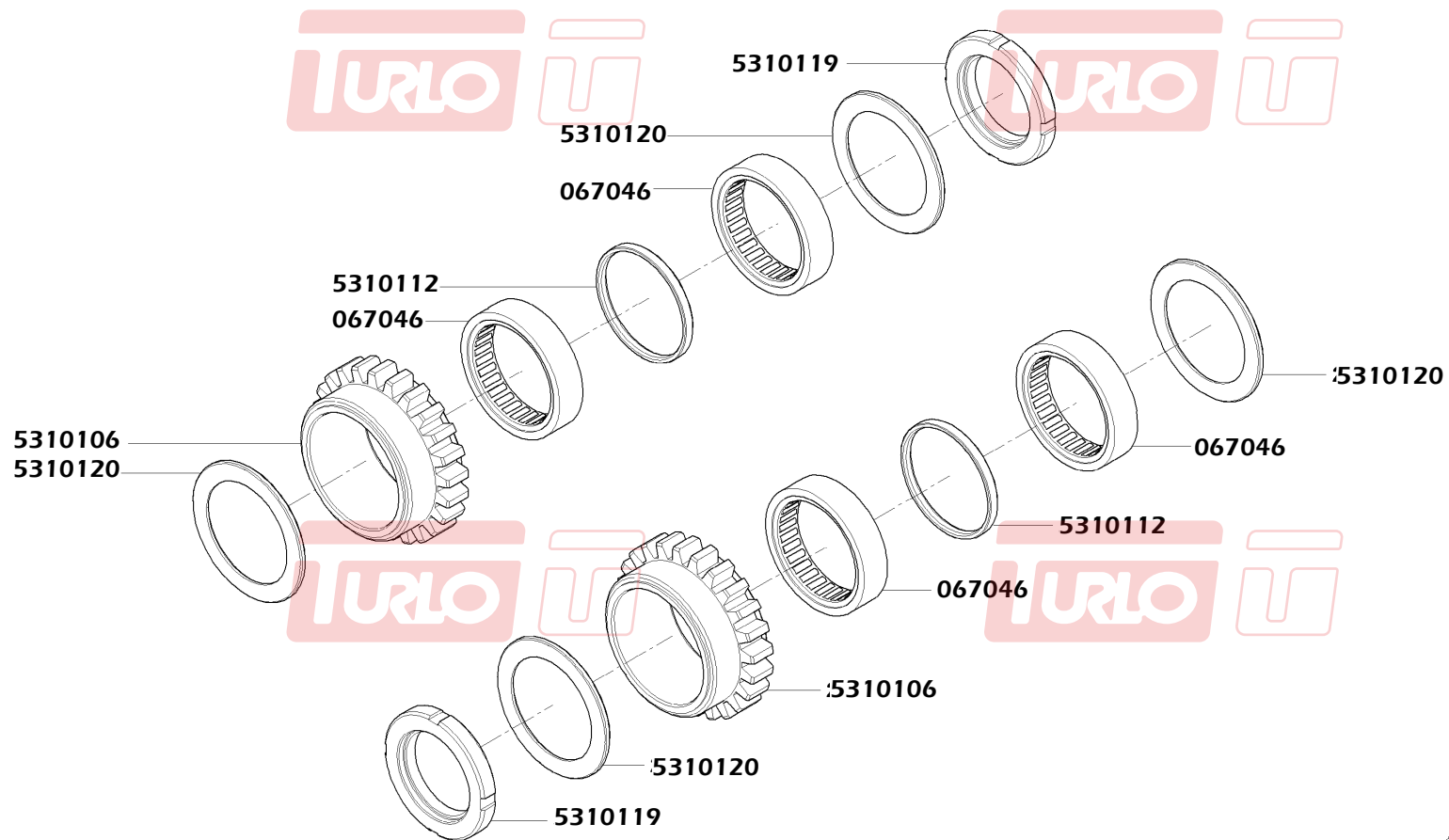




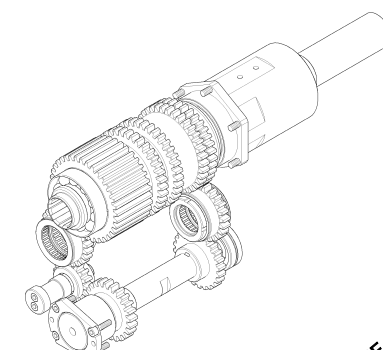
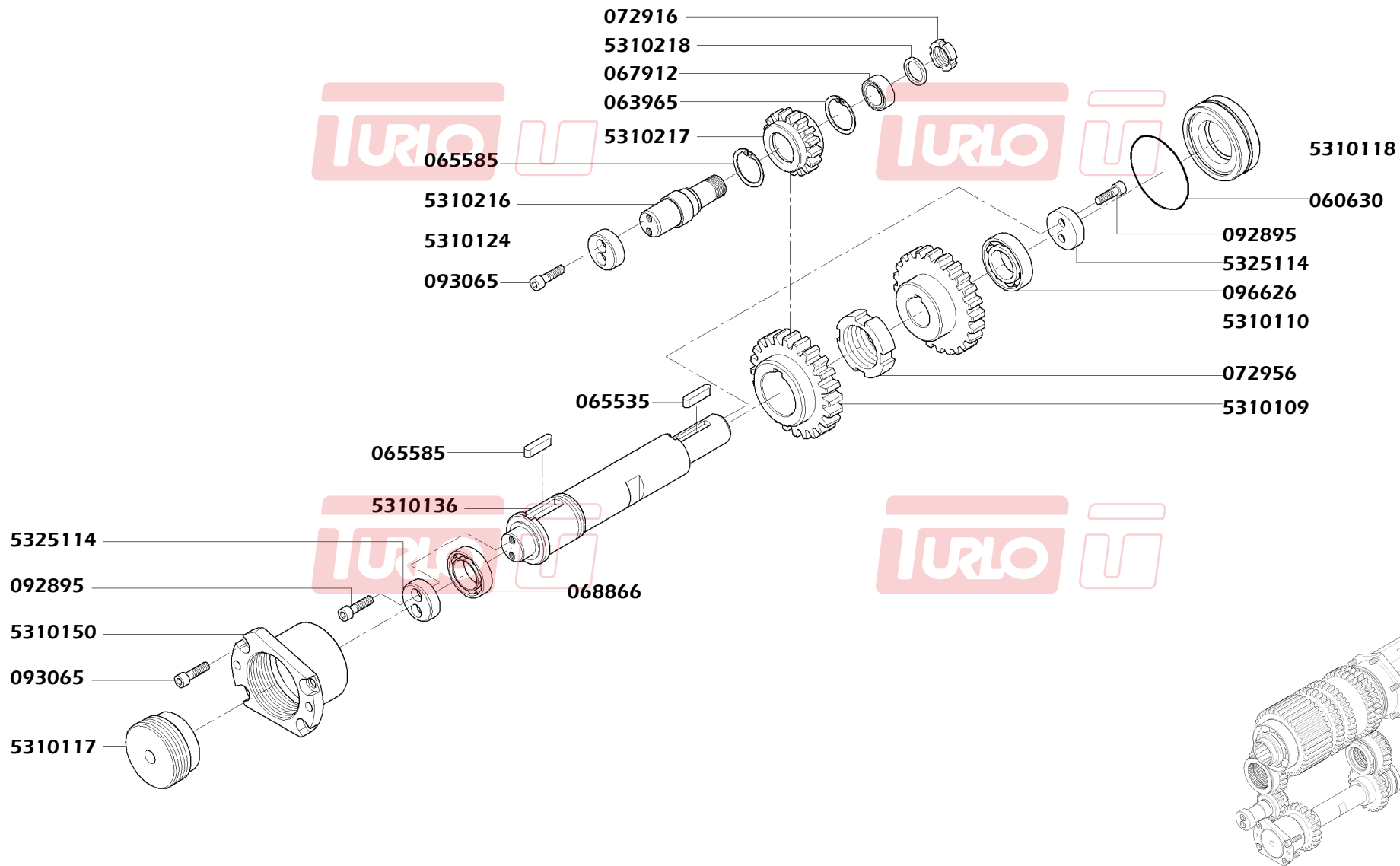
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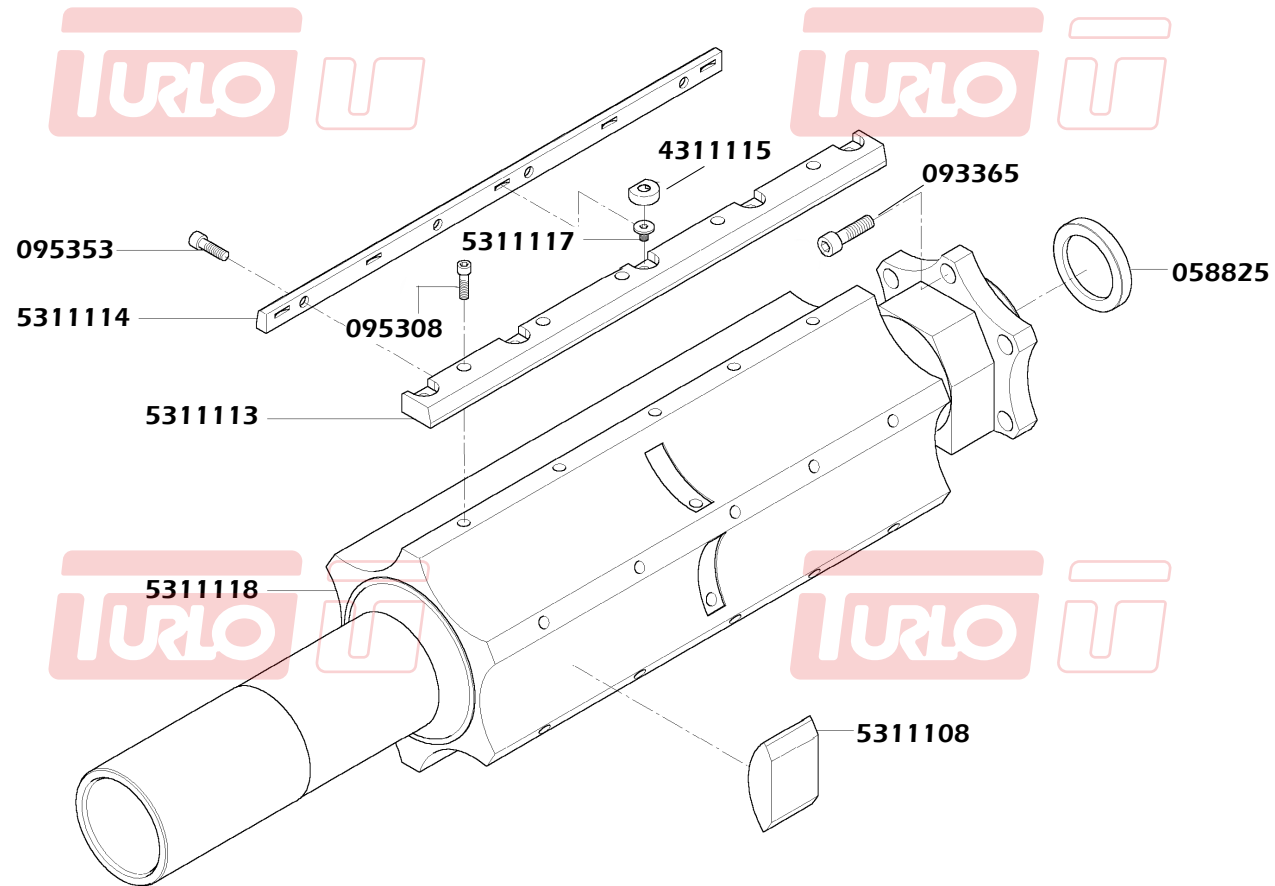
5310021 Rotazione/controrotazione madrini frontali / Toolspindle rotation/counter-rotation control

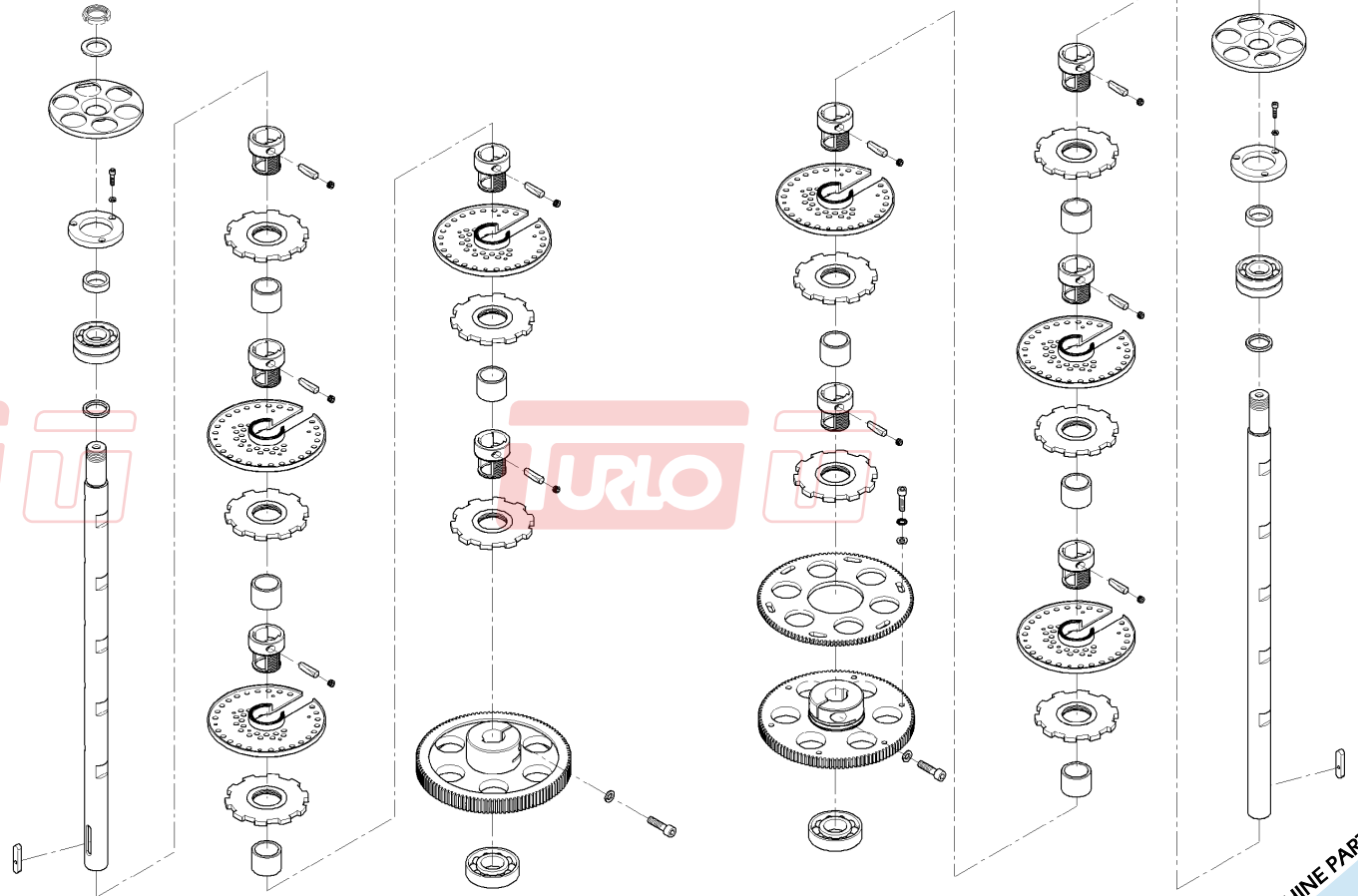
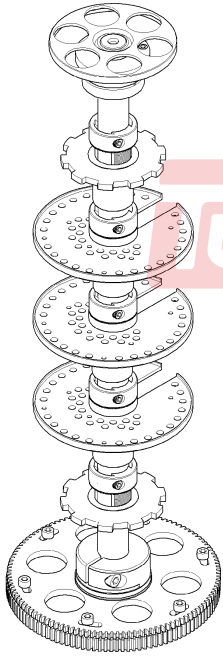
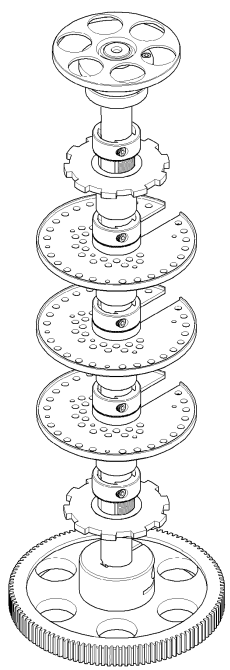


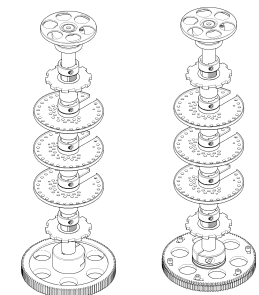
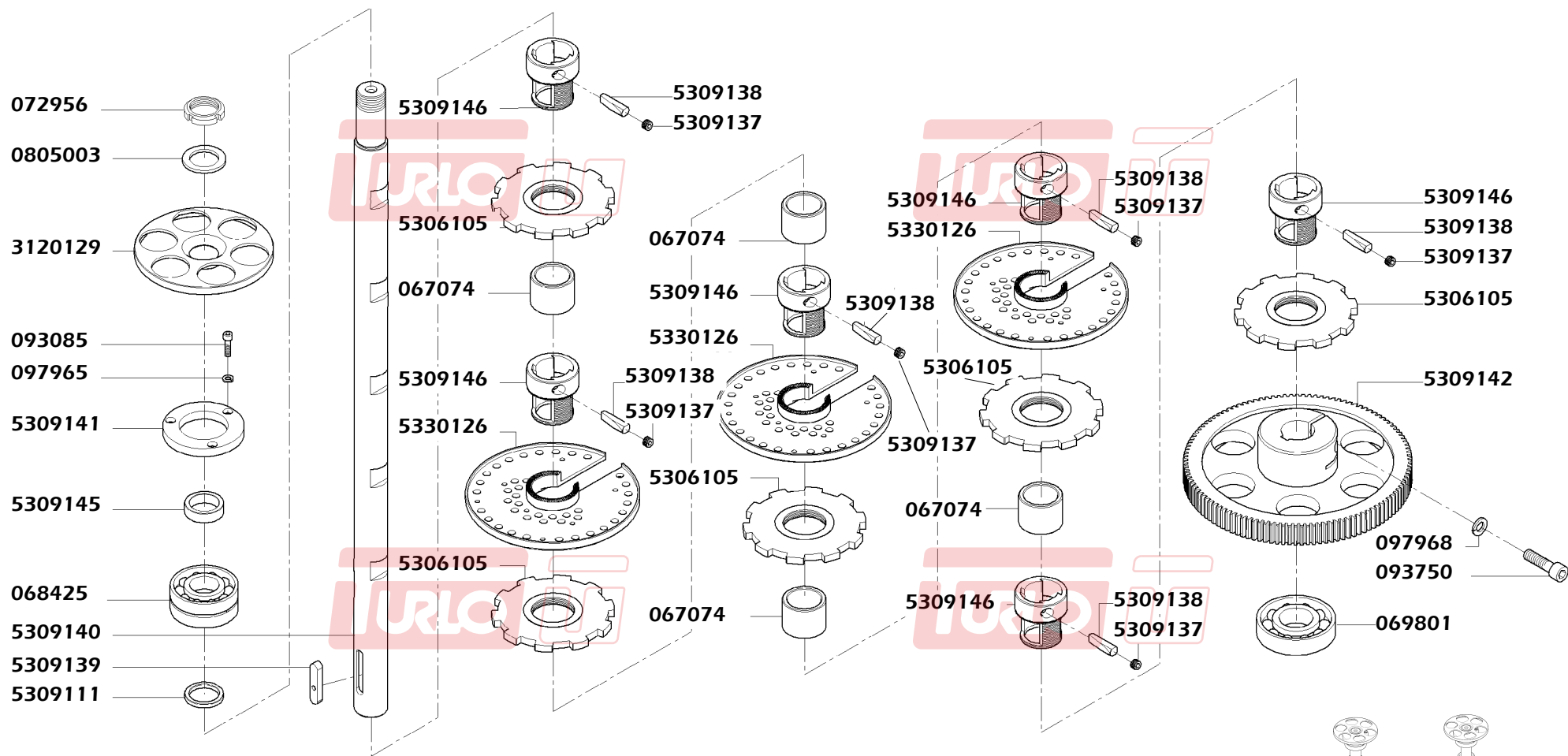


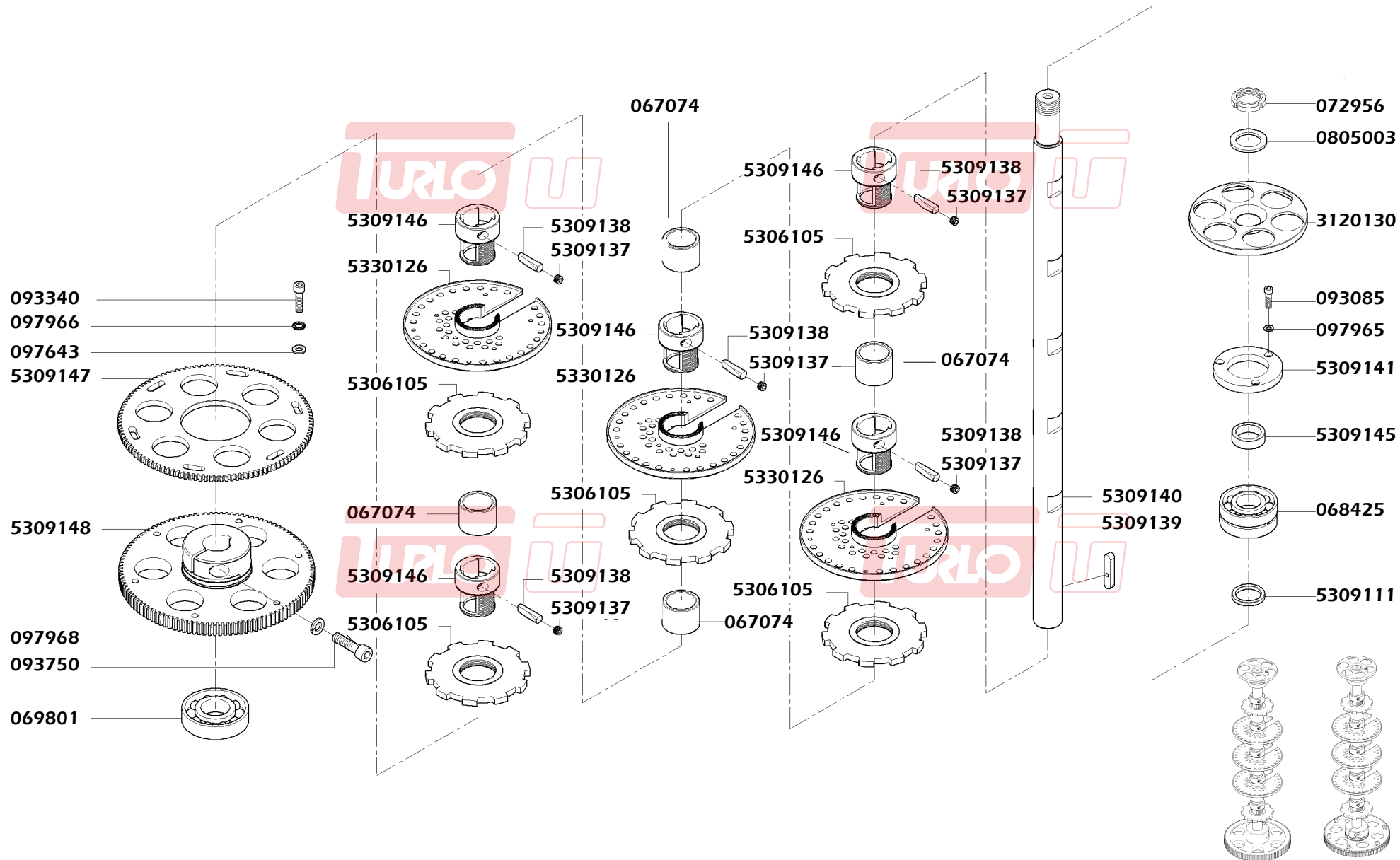


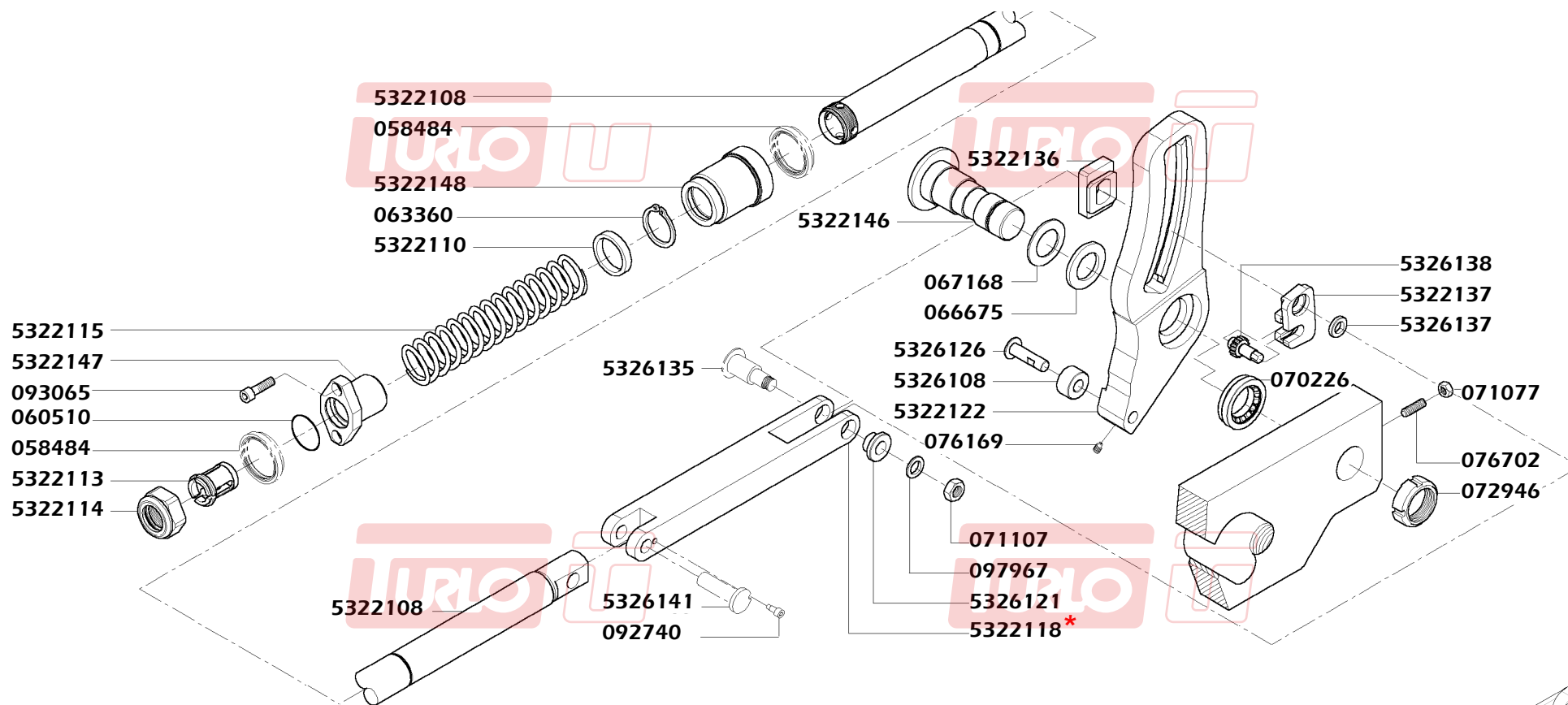






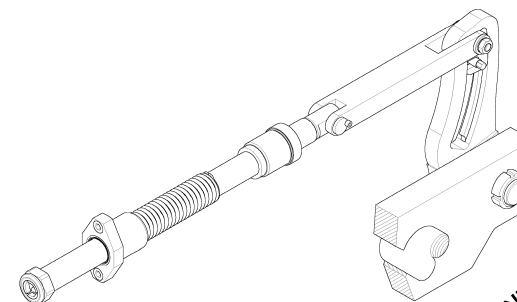


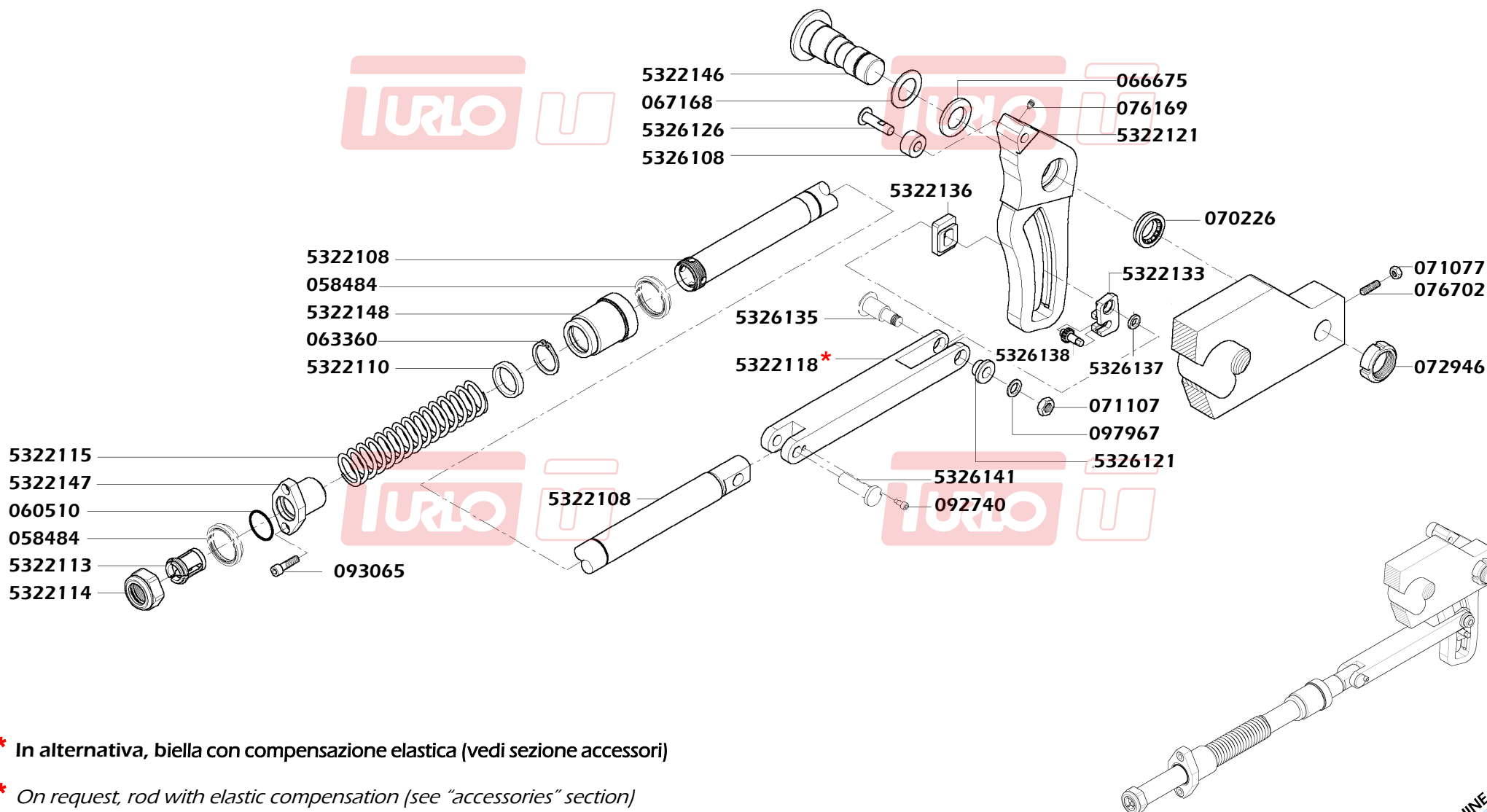




\* In alternativa, biella con compensazione elastica (vedi sezione accessori)

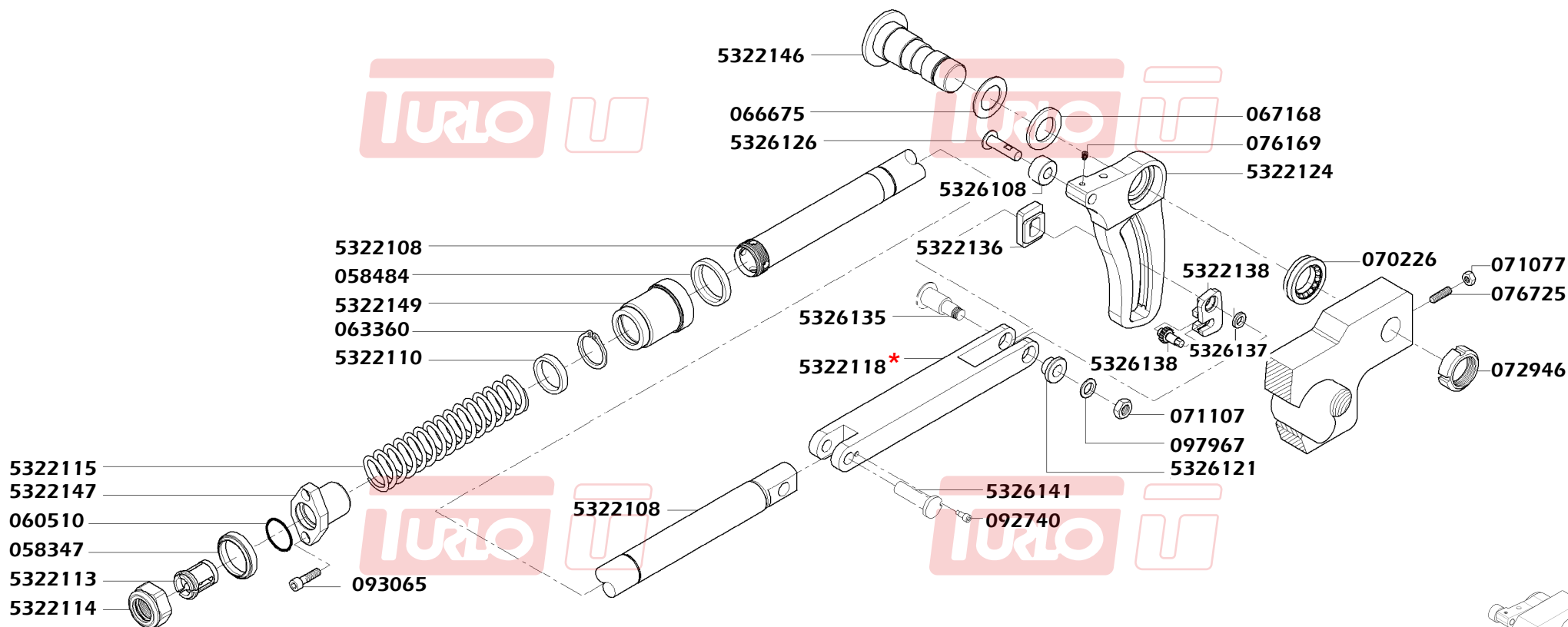
\* On request, rod with elastic compensation (see "accessories" section)





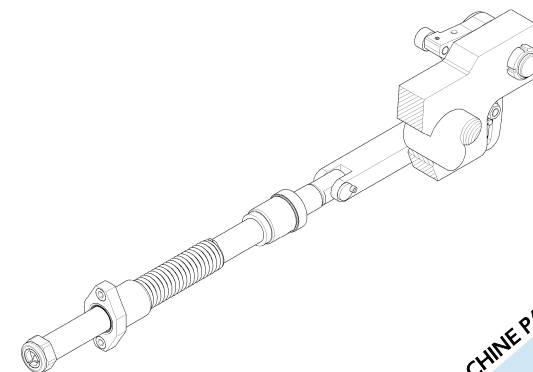
\* In alternativa, biella con compensazione elastica (vedi sezione accessori)

\* On request, rod with elastic compensation (see "accessories" section)

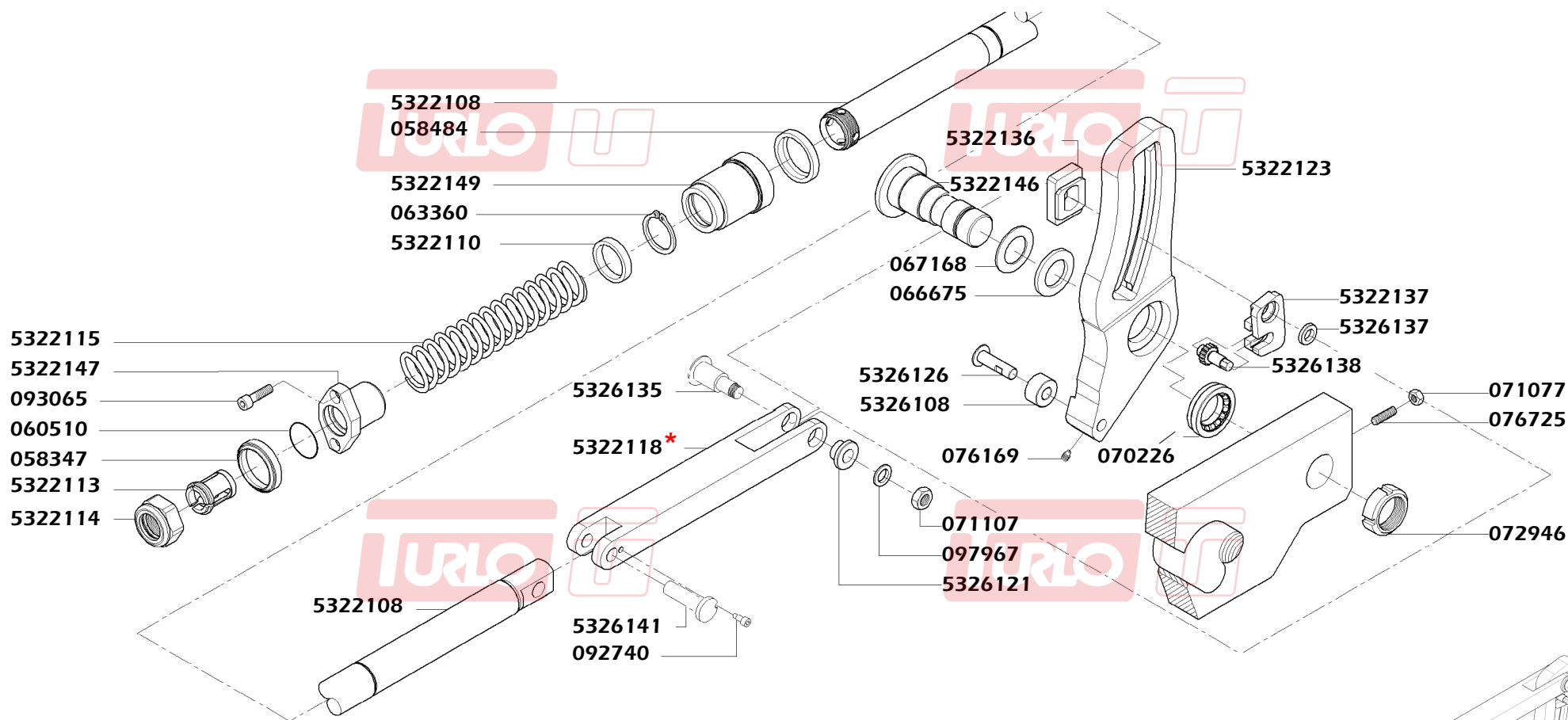


\* In alternativa, biella con compensazione elastica (vedi sezione accessori)

\* On request, rod with elastic compensation (see "accessories" section)

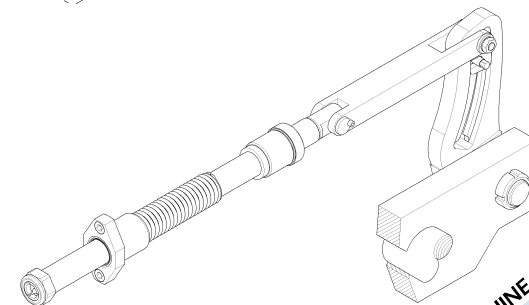


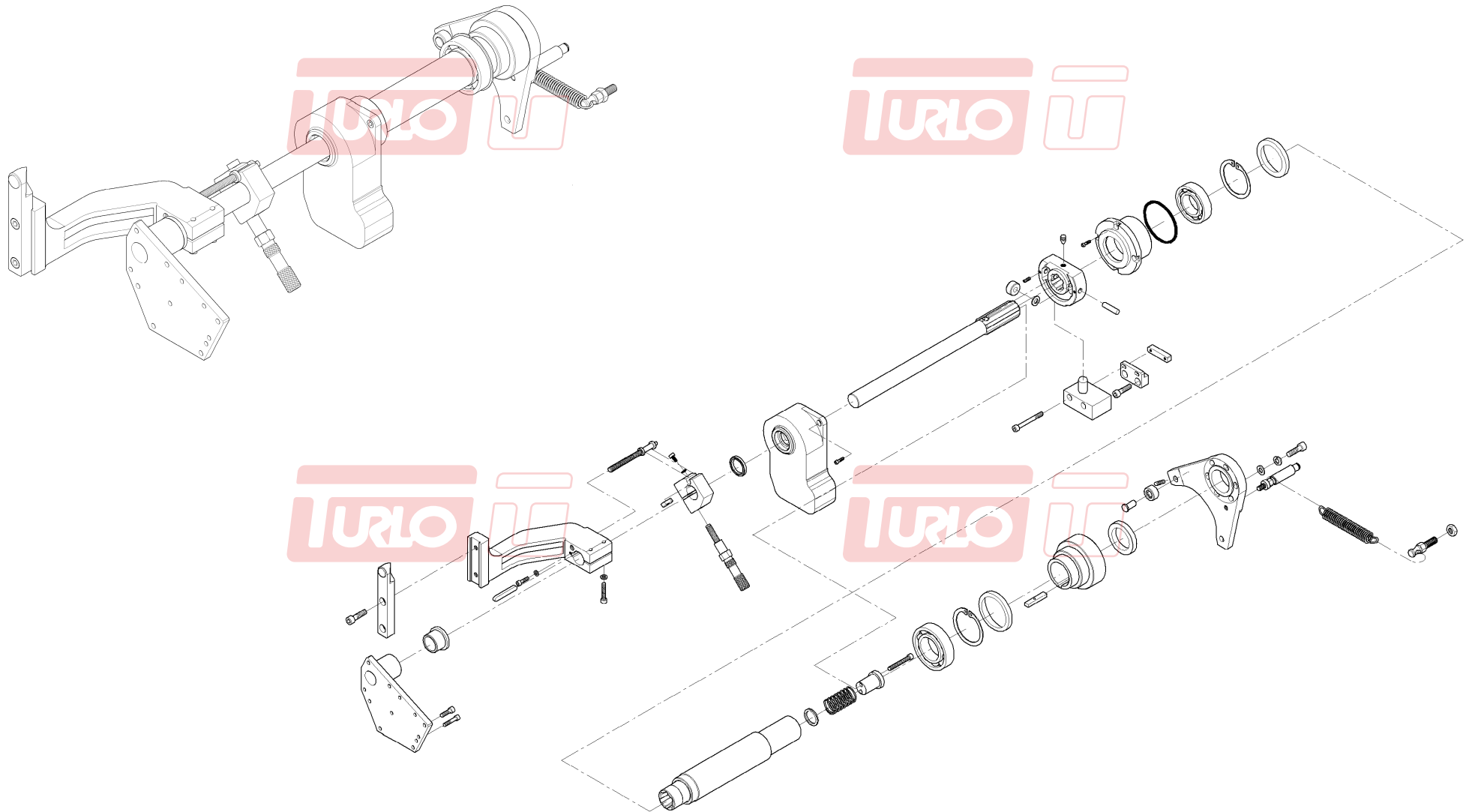


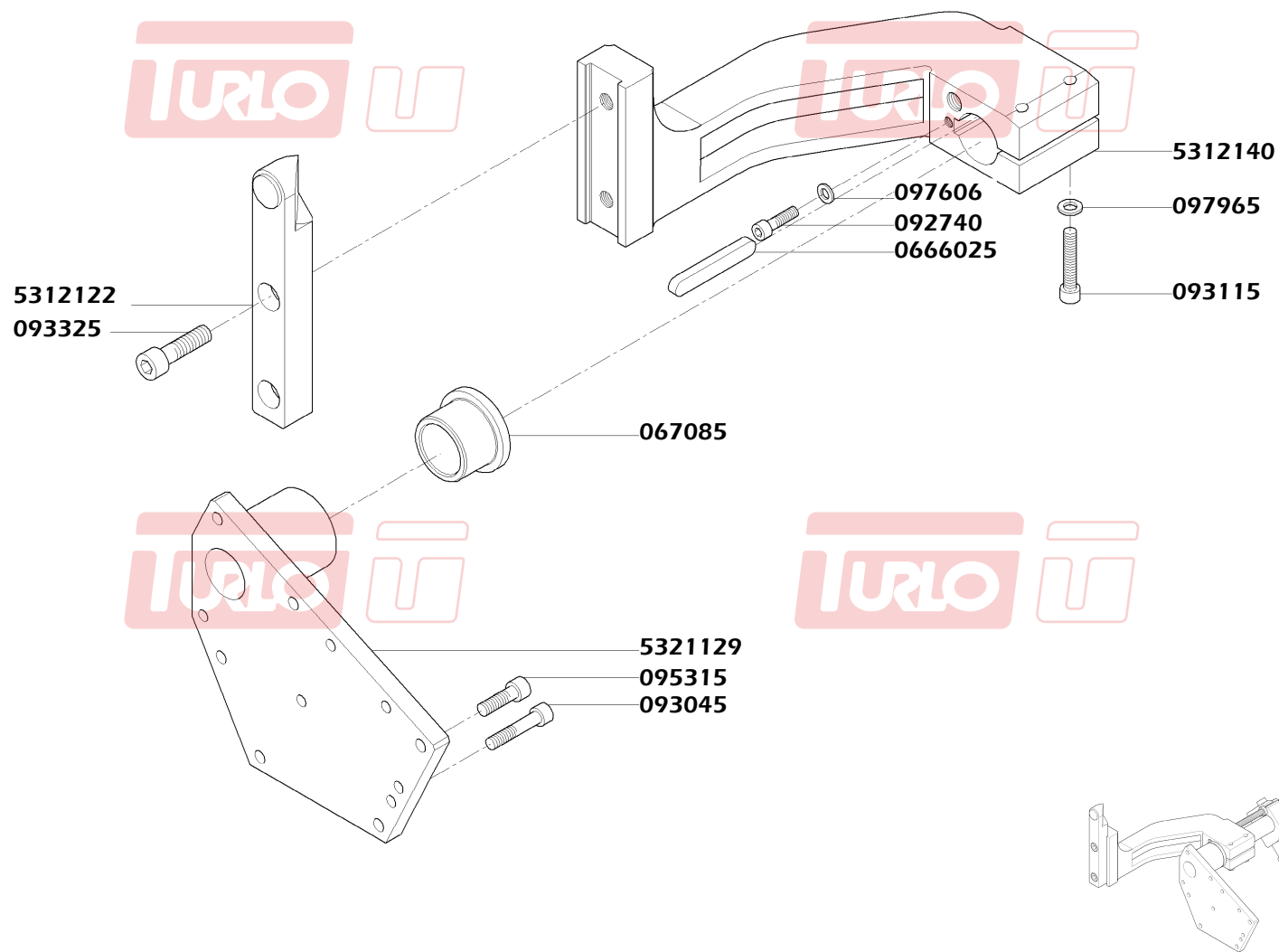


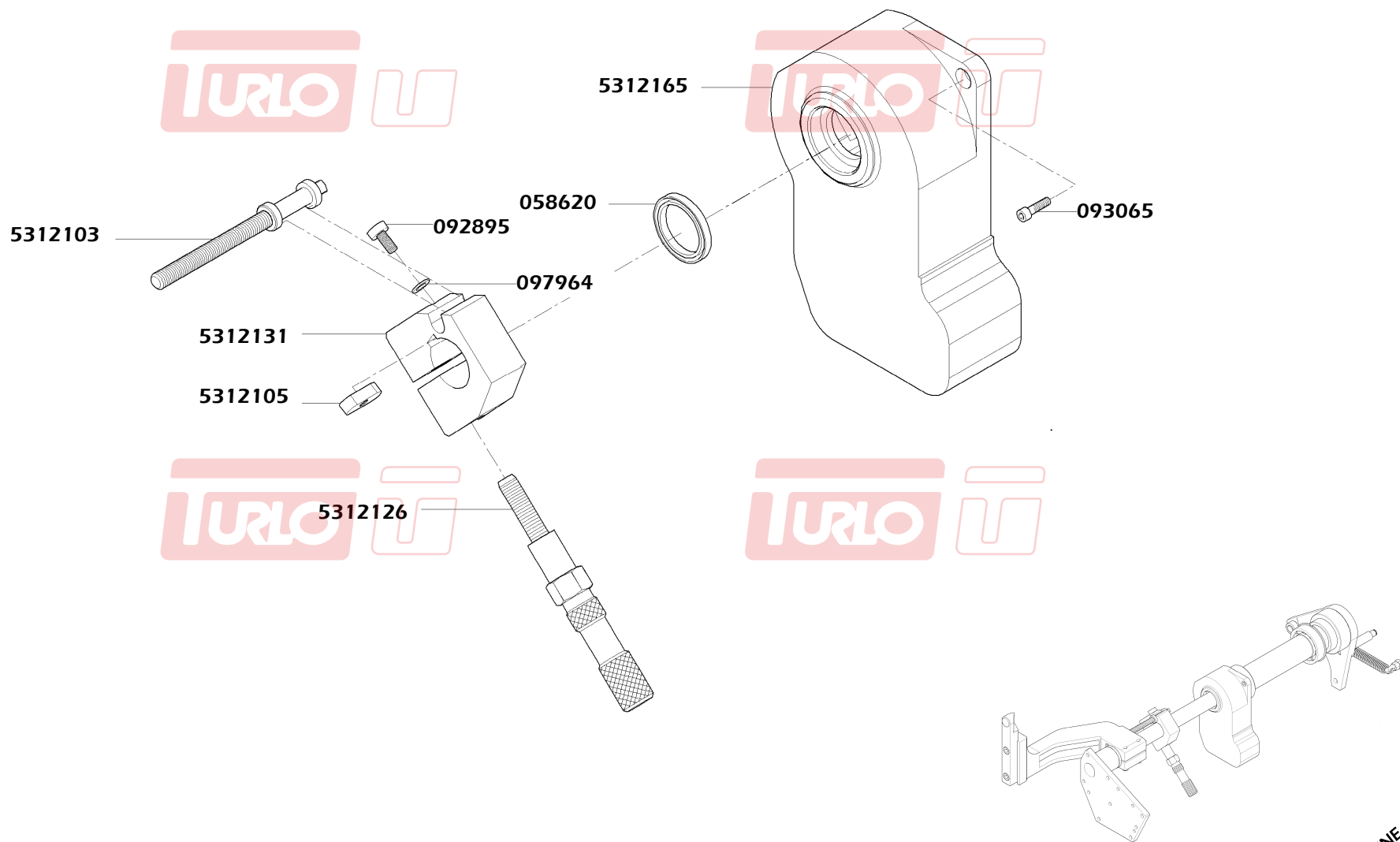
\* In alternativa, biella con compensazione elastica (vedi sezione accessori)

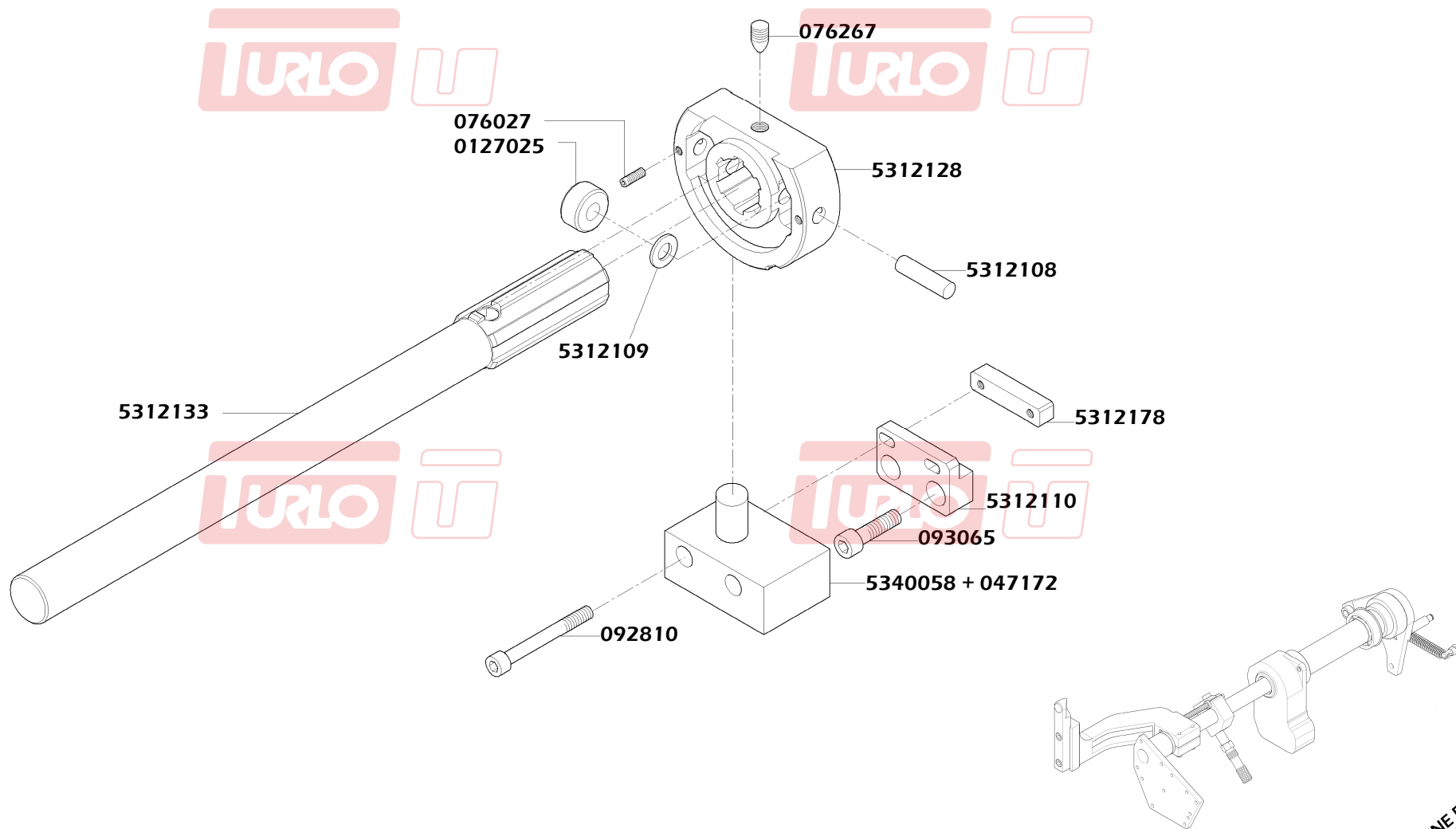
\* On request, rod with elastic compensation (see "accessories" section)

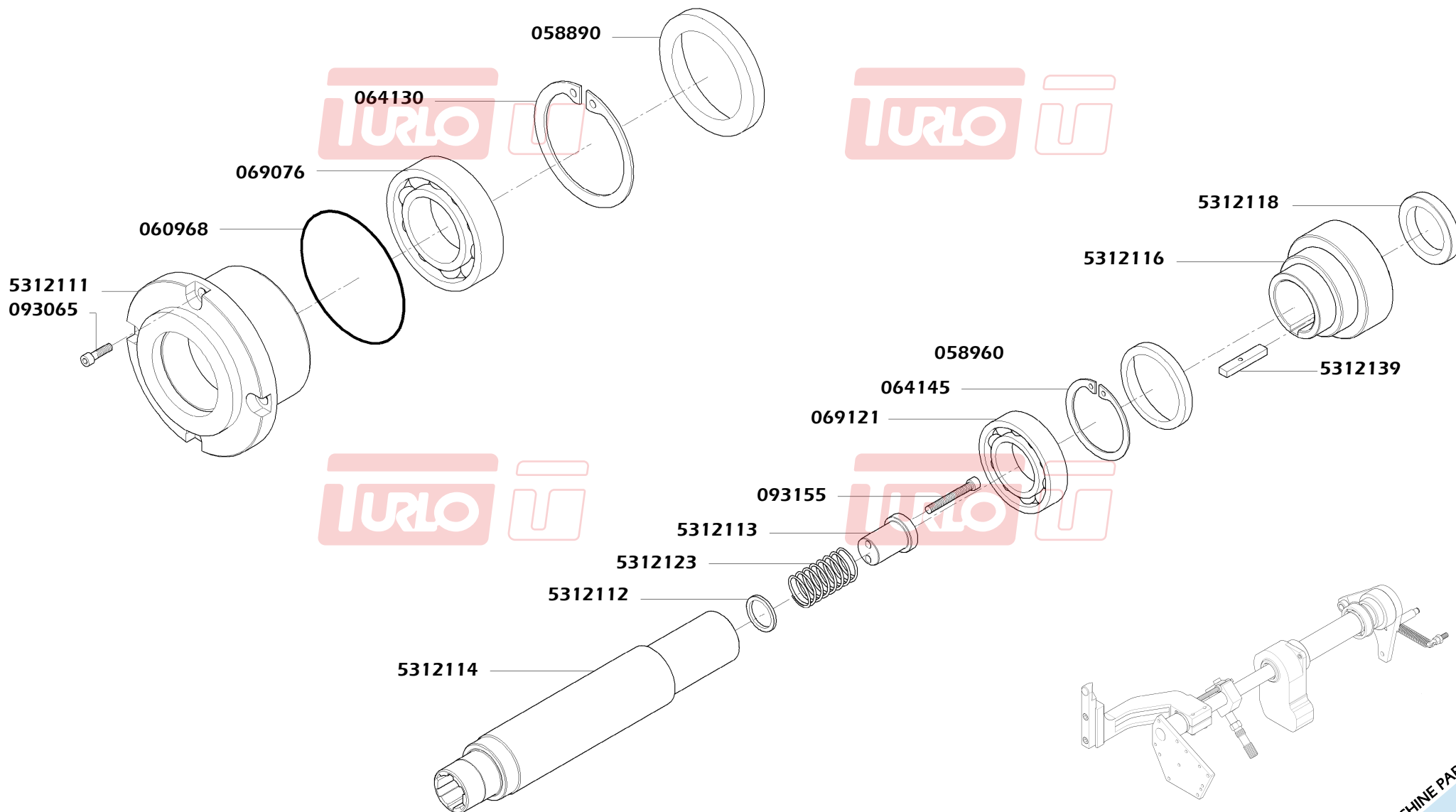


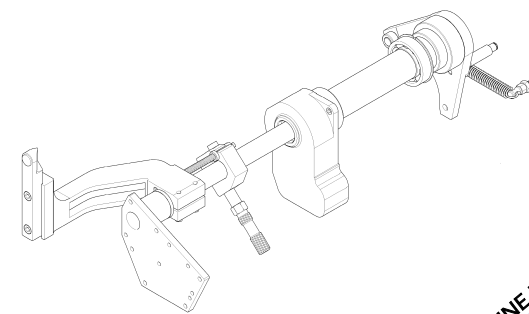
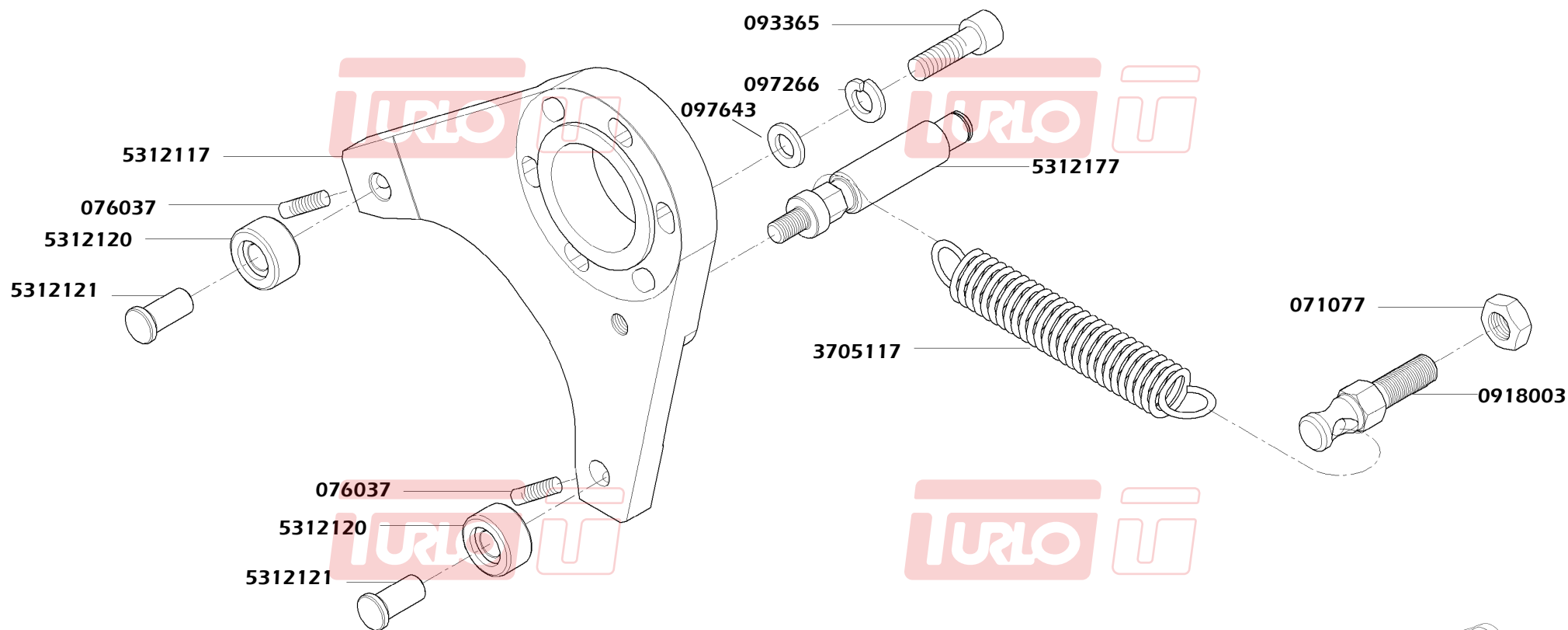


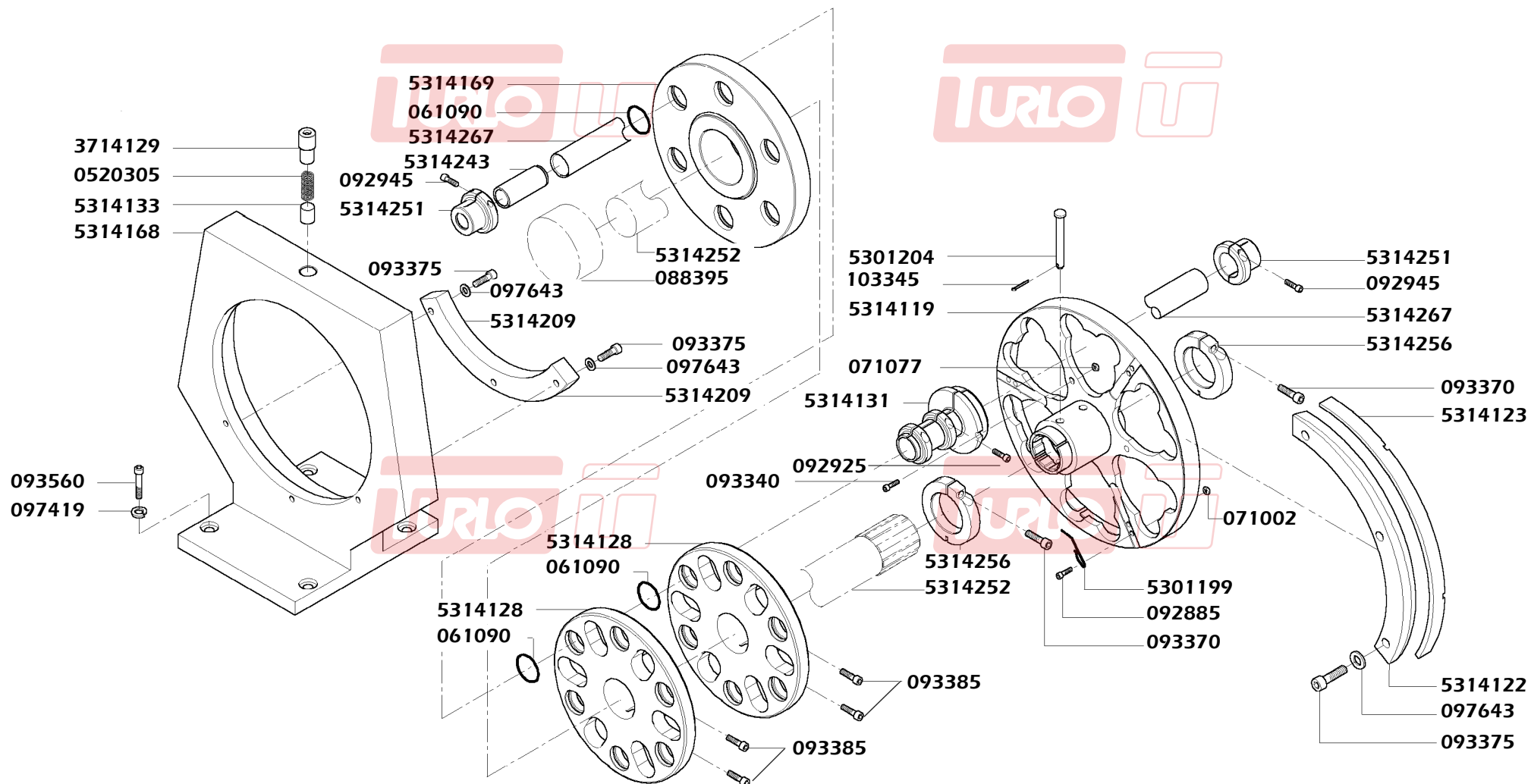




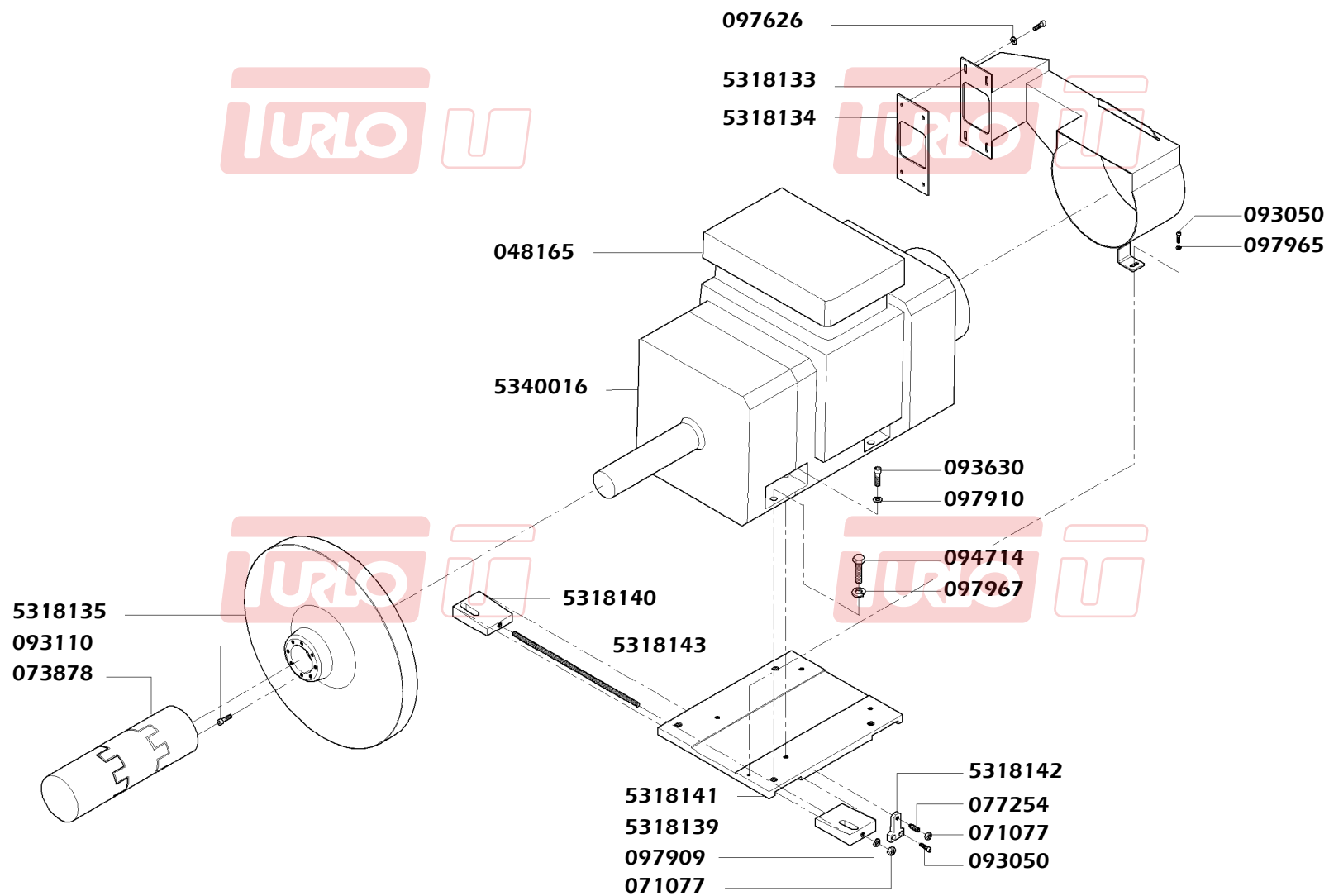






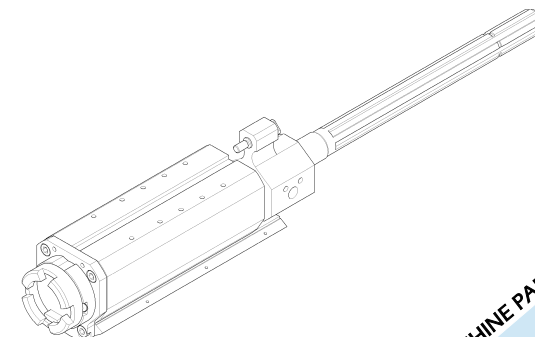
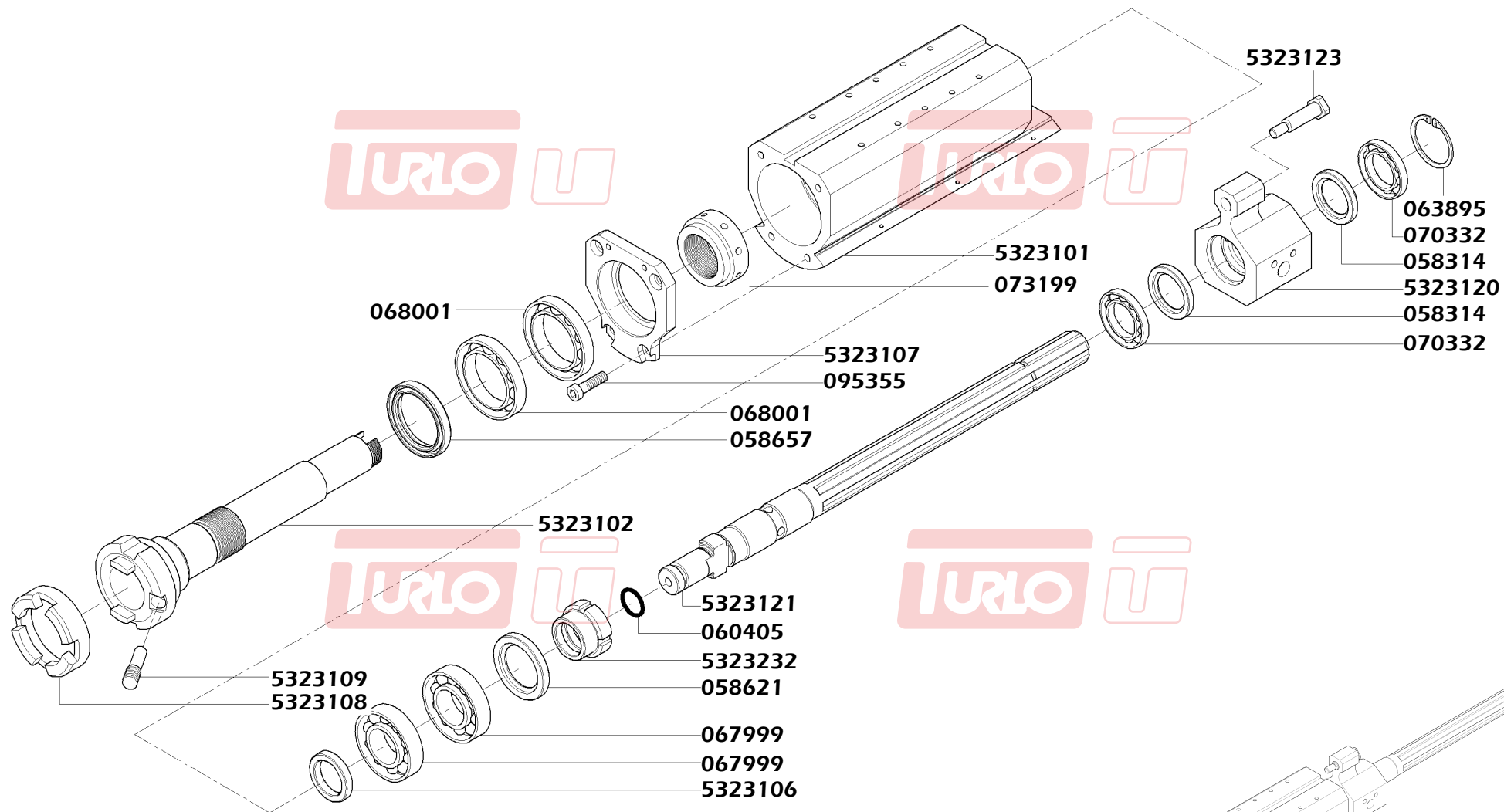


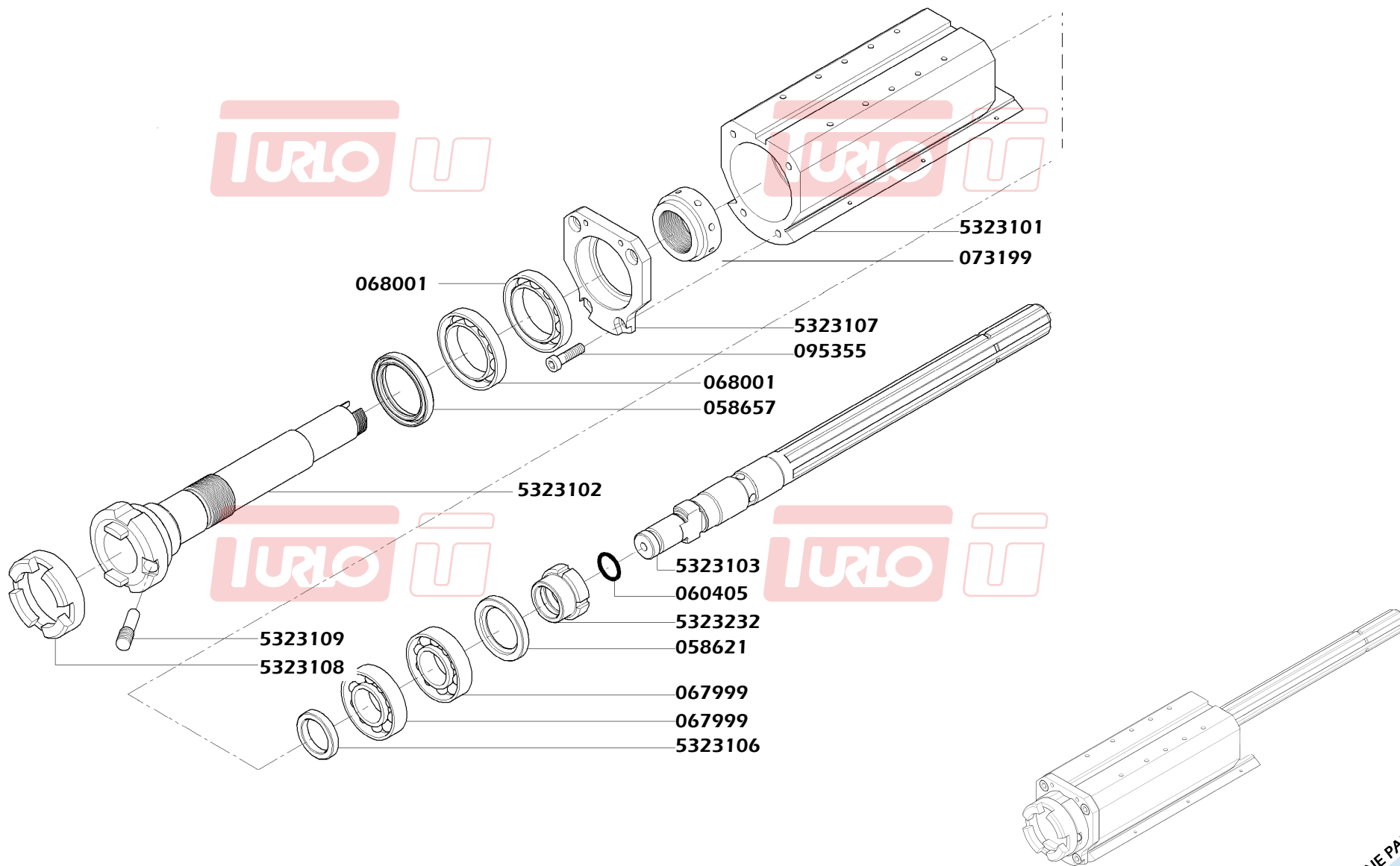


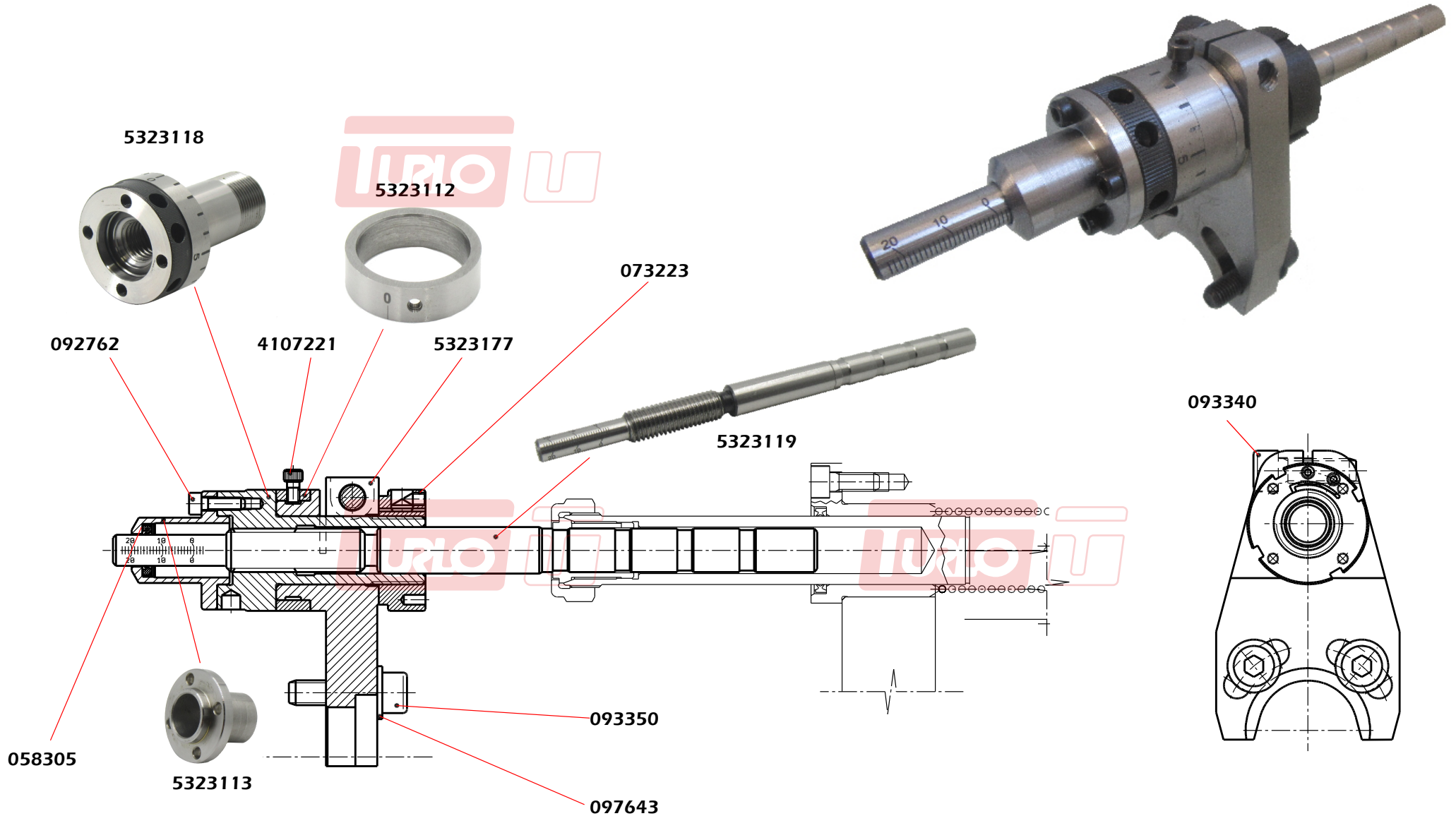


# GILDEMEISTER GM16-6

5323008 Mandrino frontale rotante con refrigeraz. Int. / *Rotating toolspindle with internal cooling*



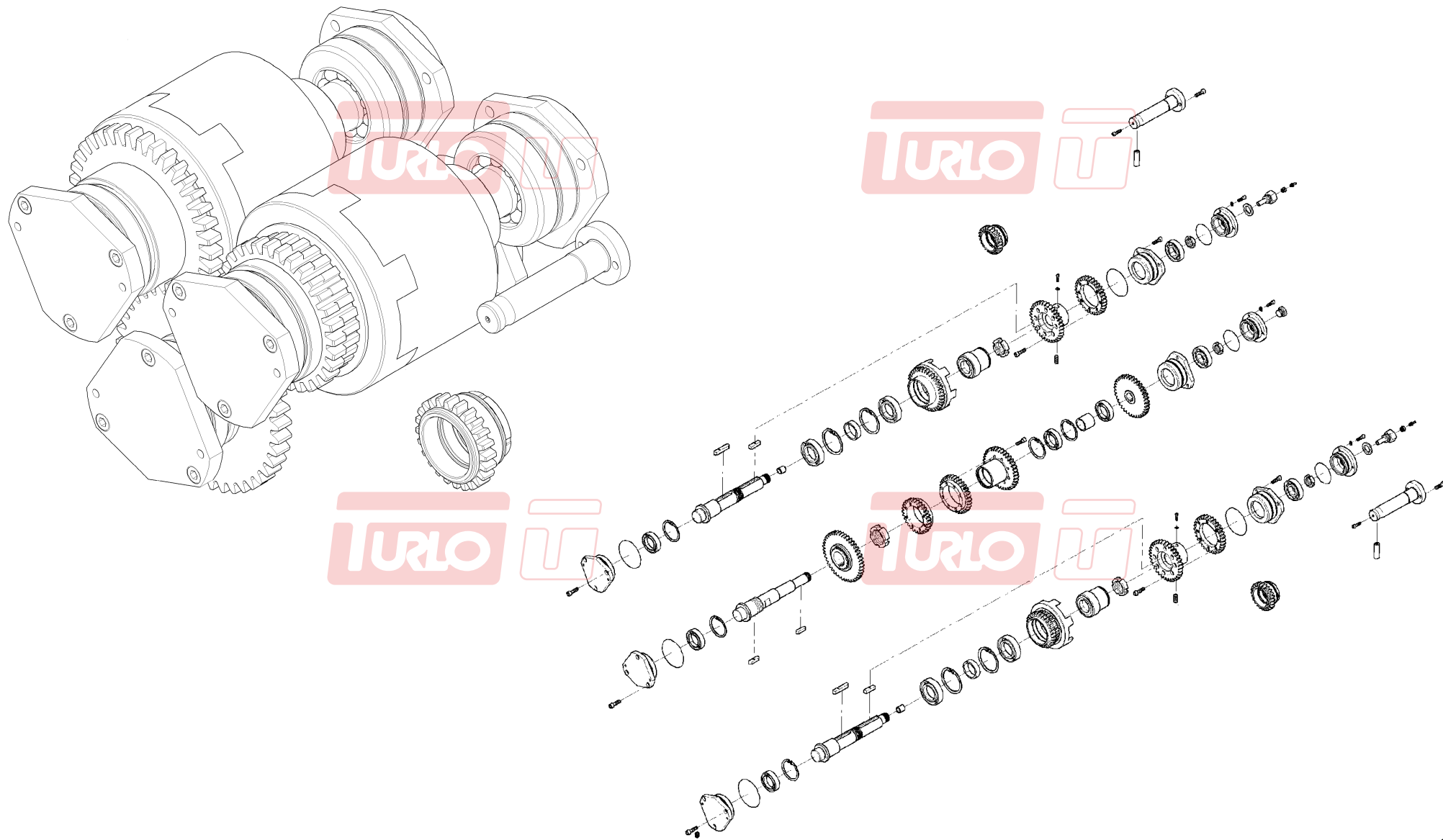






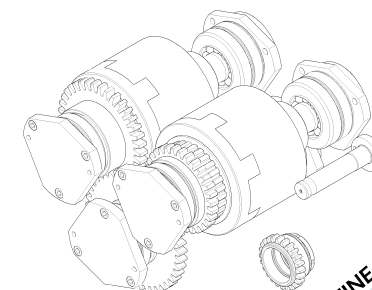
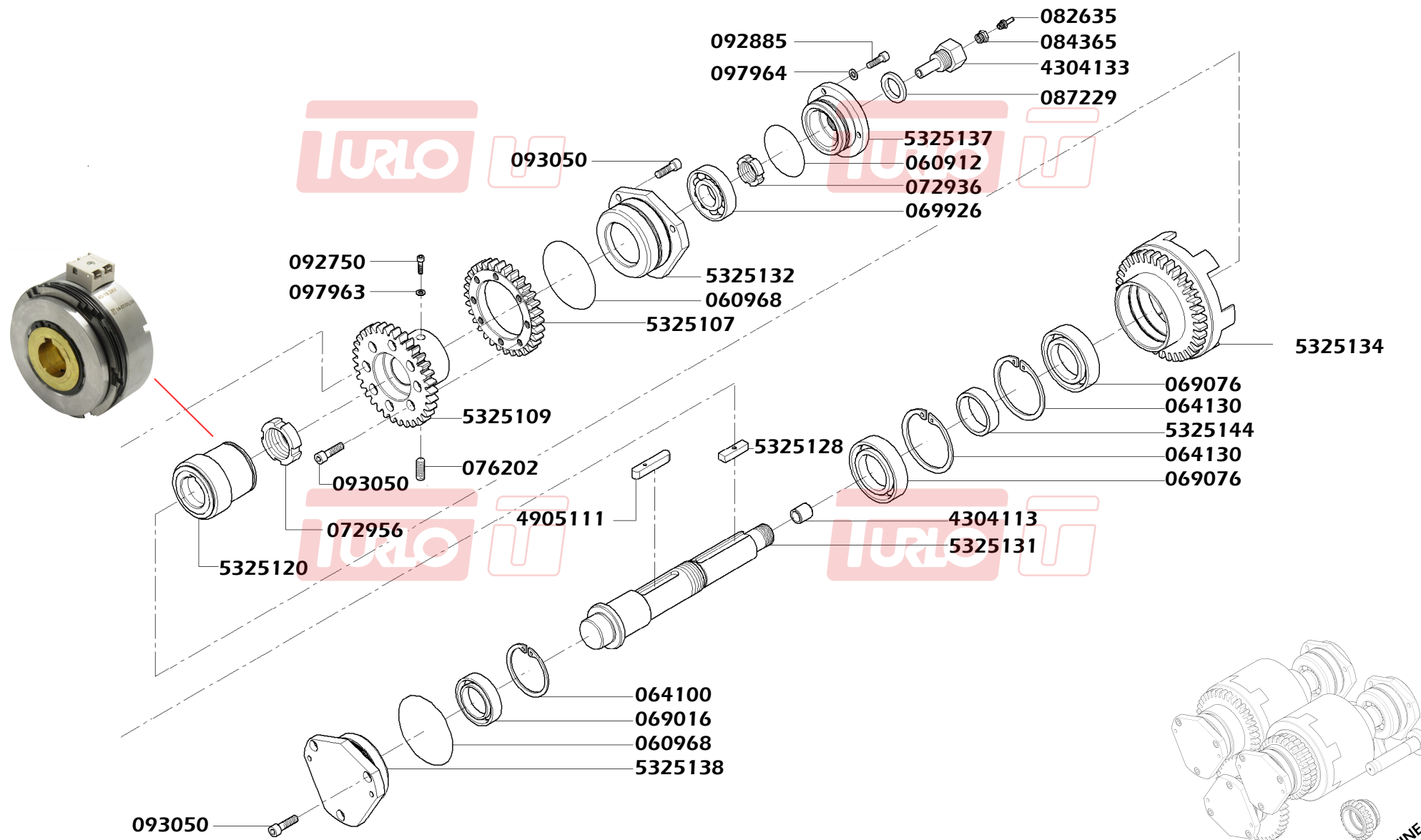
# GILDEMEISTER GM16-6

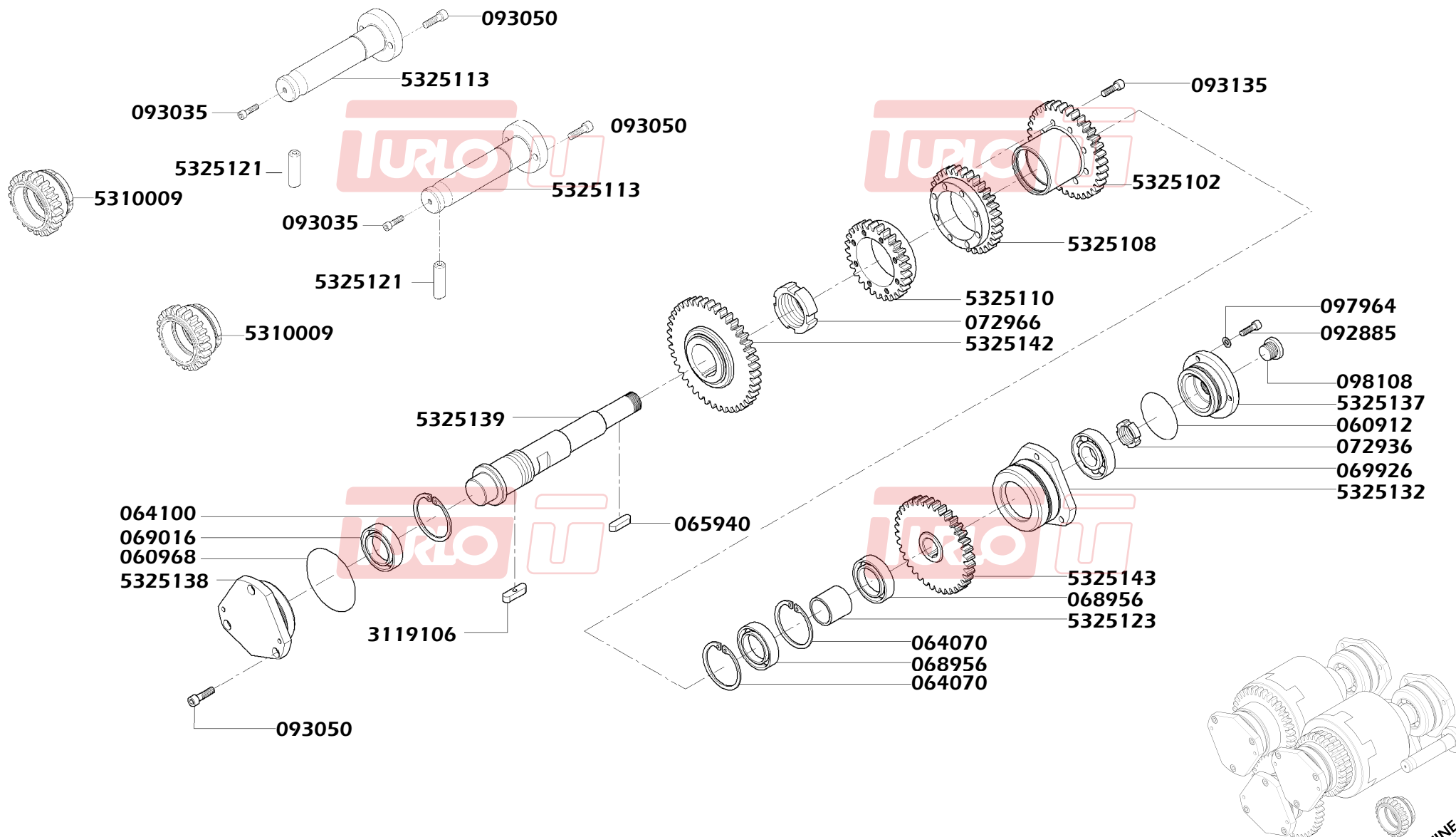
5325001 Gruppo filettatore / *Threading clutch assembly*



# GILDEMEISTER GM16-6

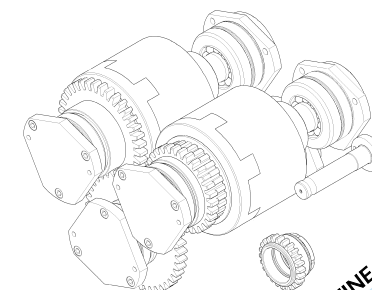
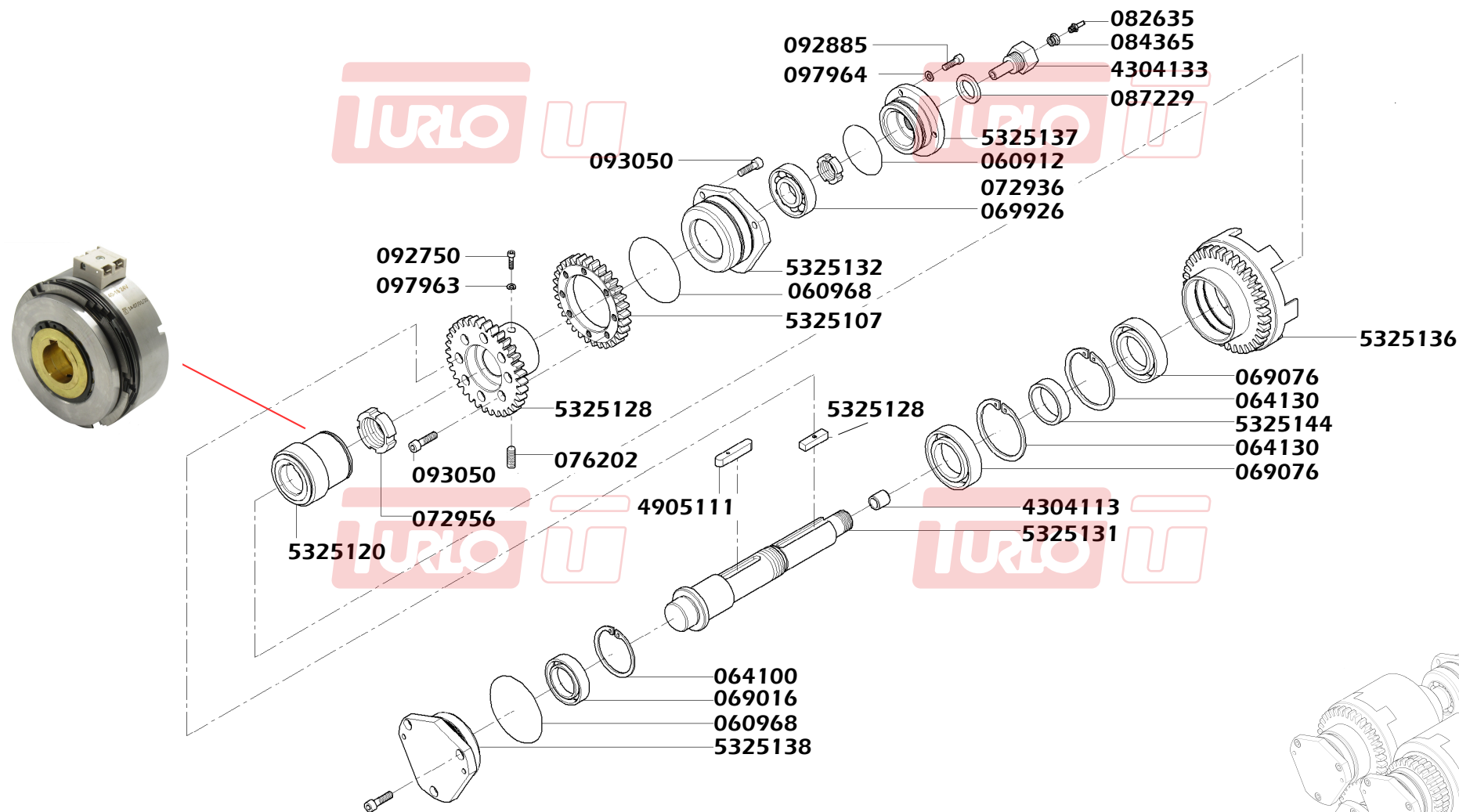
5325001 Gruppo filettatore / Threading clutch assembly





# GILDEMEISTER GM16-6

5325001 Gruppo filettatore / Threading clutch assembly









## Accessori Accessories

**Pinze**  
*Collets*

**Elementi guidabarra**  
*Bar-guide elements*

**Camme**  
*Cams*

**Torrette e portautensili**  
*Turrets and tool-holders*

**Applicazioni pinza**  
*Collet holders*

**Fermo per mandrino frontale**  
*Toolspindle stop*

**Albero intermedio per poligonatore**  
*Intermediate shaft for polygon generating attachment*

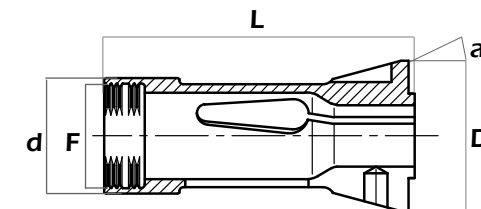
**Foratura veloce**  
*High speed drilling*

**Biella elastica**  
*Rod with elastic compensation*



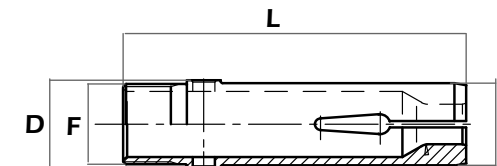
### Pinza stringibarra / Clamping collet

Codice	Codice Interno	d	D	L	a	F	Max	
Code	Turlo's code						○	⬡
9023 E 5301288 Q1103000	PST/GM16AC	30	39	80,5	15°	AtcB Ø 27,12x1,5 60°	16	14



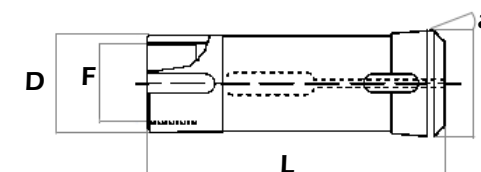
### Pinza spingibarra / Feed finger

Codice	Codice Interno	d	D	L	F	Max	
Code	Turlo's code					○	⬡
9268 E 5301235 L1102200	PSP/GM16AC	20	22	86	M20x1,0	16	14





### Pinza pick-up / Pick-up collet

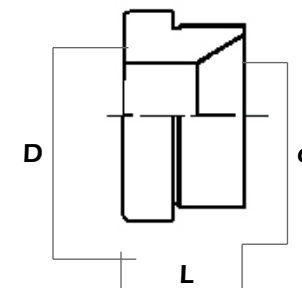
Codice	Codice Interno	d	D	L	a	F	Max	
Code	Turlo's code						○	⬡
750302 20032101 Q0001870	PPK/GM16AC	18,7	25	51,5	8°	AtcB Ø21x1,5 60°	16	14









### Anelli guidabarra / Guide rings

Codice	Codice Interno	d	D	L	Max	
Code	Turlo's code					
T1101851	BGB/GM16AC-T1851	16	18,5	18	13	10
T1101850	BGB/GM16AC-T1850	18,5	0	12	16	14



### Tubi guidabarra per mandrino / Guide tubes for toolspindle

ØCodice Code	Ømax barra / bar		Chmax barra / bar	
				
5301308	4		4	
	5			
5301309	6		5	
	6,5		6	
	7			
	7,5			
5301310	8		7	
	8,5		8	
	9			
	9,5			
5301311	10		9	
	10,5			
	11			
5301312	11,5		10	
	12			
	12,5			
	13			





### Corsa delle slitte radiali con camme standard – Radial slides stroke with standard cams

Codice Camma piena Pos.2,3,4 rad	Codice Camma piena Pos.1,5,6 rad	Codice Camma per Platorello	Angolo di lavoro	Angolo di salita	Angolo di discesa	Angolo inizio lavoro	Angolo fine lavoro	Angolo di riposo	Alzata rapida "H"	Alzata lavoro "h"	Corsa lav. Min. Slitta "s"	Corsa lav. Max. slitta "s"
Code Cam Pos.2,3,4 rad	Code Cam Pos.1,5,6 rad	Code Plate cam	Working angle	Slide angle	Drop angle	Work start angle	Work end angle	Rest angle	Fast lift "H"	Work lift "h"	Min. working slide "s"	Max. working slide "s"
5349601	*5334801	5349102	171°	54°	51°	3°	174°	0°	35	0	0	0
5349602	*5349802	5349103	165°	54°	51°	3°	168°	6°	34	1	0,4	0,8
5349603	*5349803	5349104	165°	54°	51°	3°	168°	6°	33	2	0,8	1,6
5349604	*5349804	5949105	165°	54°	51°	3°	168°	6°	31	4	1,6	3,2
5349605	*5349805	5349106	165°	54°	51°	3°	168°	6°	27	8	3,2	6,4
5349606	*5349806	5349107	165°	54°	51°	3°	168°	6°	23	12	4,8	9,6
5349607	*5349807	5349108	165°	54°	51°	3°	168°	6°	19	16	6,4	12,8
5349608	*5349808	5349109	165°	54°	51°	3°	168°	6°	15	20	8,0	16

\* Per queste posizioni sono utilizzabili anche le camme del vecchio modello (5359133 – 140)

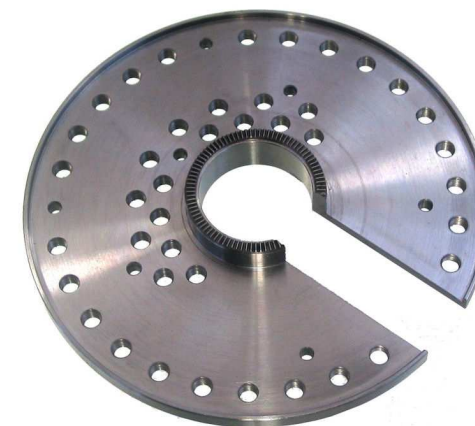
\* For these positions, the cams of the old model (5359133 – 140) can be used.



**Camma**  
*Cam*



**Camma per platorello**  
*Plate cam*



**Platorello**  
*Plate*  
**5330126**



**Corsa delle slitte assiali con camme standard** – *Axial slides stroke with standard cams*

Codice Camma per Platorello	Angolo di lavoro	Angolo di discesa	Angolo di riposo	Angolo inizio lavoro	Angolo fine lavoro	Alzata lavoro "h"	Corsa lav. Min. slitta	Corsa lav. Max. slitta
Code Plate cam	Working angle	Drop angle	Rest angle	Work start angle	Work end angle	Work lift "h"	Min. working slide "s"	Max. working slide "s"
5351102	159°	60°	12°	9°	168°	5	4,5	9
5351103	159°	60°	12°	9°	168°	10	9	18
5351104	159°	60°	12°	9°	168°	20	18	36
5351105	159°	60°	12°	9°	168°	25	22,5	45



**Camma per platorello**  
*Plate cam*



**Platorello**  
*Plate*  
**5330130**



### Corsa dei mandrini frontali con camme standard – Frontal spindles stroke with standard cams

Codice Camma piena Pos.2,3,4 rad	Codice Camma piena Pos.1,5,6 rad	Codice Camma per Platorello	Angolo di lavoro	Angolo di salita	Angolo di discesa	Angolo inizio lavoro	Angolo fine lavoro	Angolo di riposo	Alzata rapida "H"	Alzata lavoro "h"	Corsa lav. Min. Slitta "s"	Corsa lav. Max. slitta "s"
Code Cam Pos.2,3,4 rad	Code Cam Pos.1,5,6 rad	Code Platecam	Working angle	Slide angle	Drop angle	Work start angle	Work end angle	Rest angle	Fast lift "H"	Work lift "h"	Min. working slide "s"	Max. working slide "s"
5349601	*5334801	5349102	171°	54°	51°	3°	174°	0°	35	0	0	0
5349602	*5349802	5349103	165°	54°	51°	3°	168°	6°	34	1	0,4	1,8
5349603	*5349803	5349104	165°	54°	51°	3°	168°	6°	33	2	0,8	3,6
5349604	*5349804	5949105	165°	54°	51°	3°	168°	6°	31	4	1,6	7,2
5349605	*5349805	5349106	165°	54°	51°	3°	168°	6°	27	8	3,2	14,4
5349606	*5349806	5349107	165°	54°	51°	3°	168°	6°	23	12	4,8	21,6
5349607	*5349807	5349108	165°	54°	51°	3°	168°	6°	19	16	6,4	28,8
5349608	*5349808	5349109	165°	54°	51°	3°	168°	6°	15	20	8,0	36

\* Per queste posizioni sono utilizzabili anche le camme del vecchio modello (5359133 – 140)

\* For these positions, the cams of the old model (5359133 – 140) can be used.



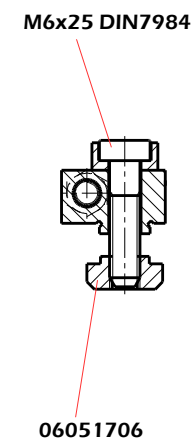
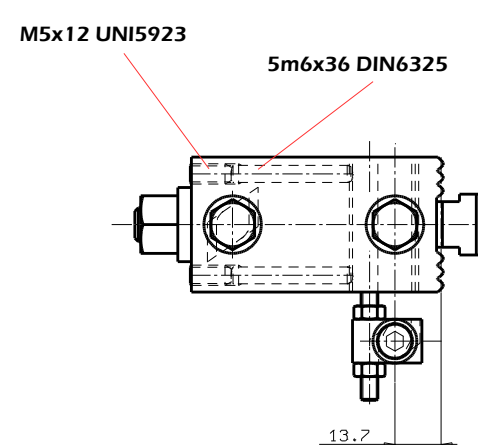
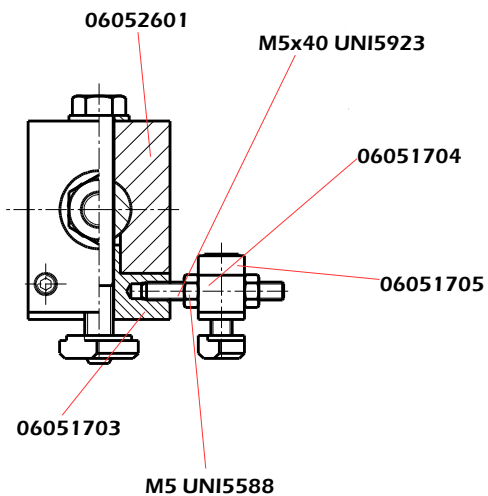
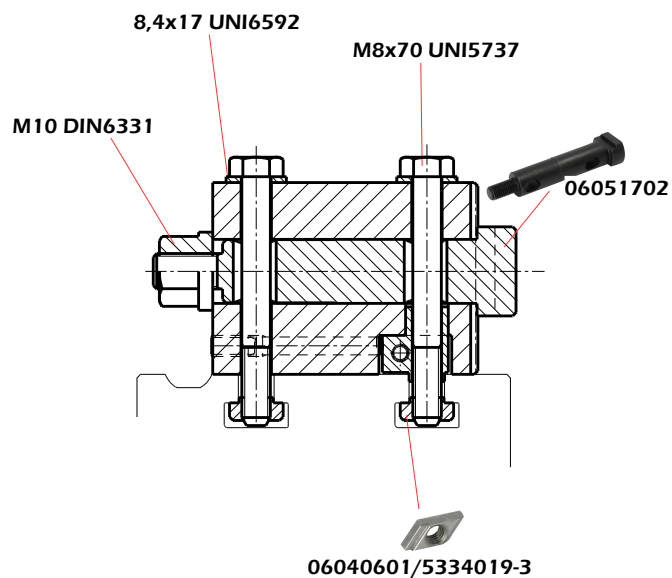
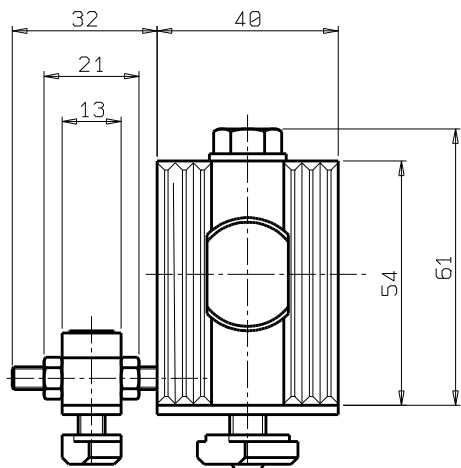
**Camma**  
*Cam*



**Camma per platorello**  
*Plate cam*



**Platorello**  
*Plate*  
**5330126**





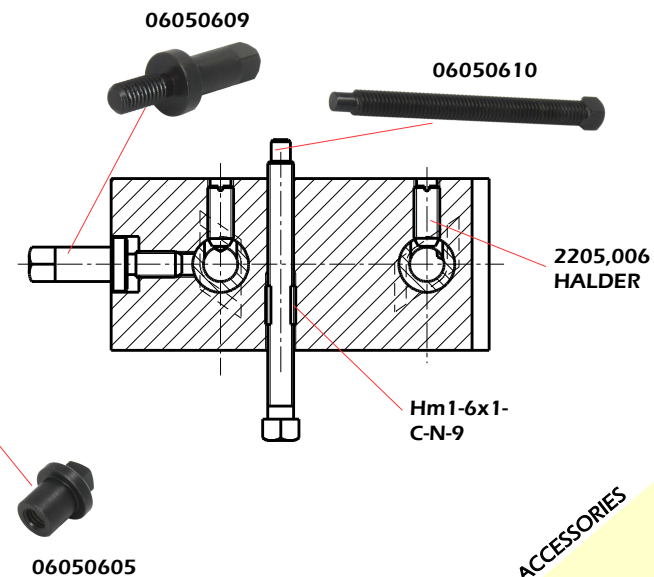
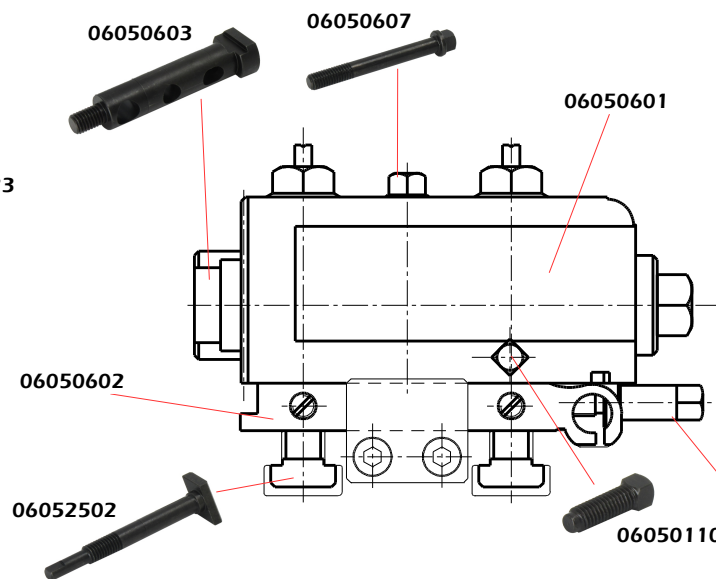
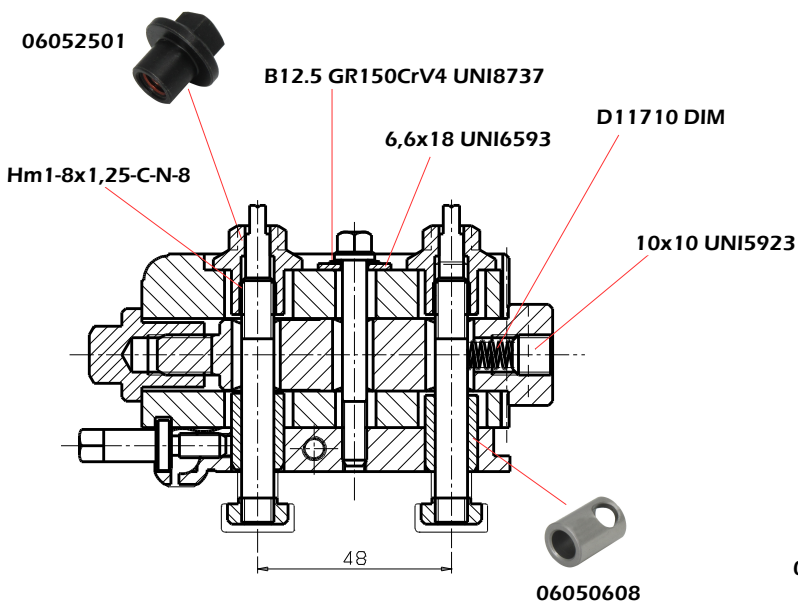
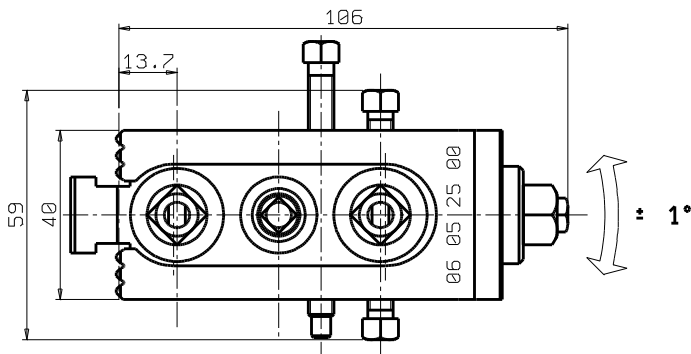


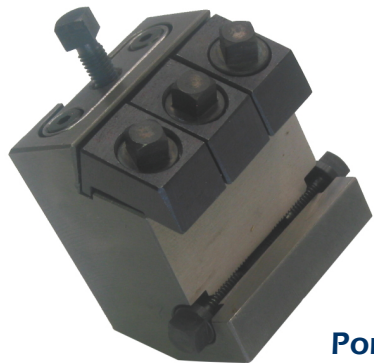
REGOLAZIONI TORRETTA

Radiale ±1.5 mm  
 Assiale ±7.5 mm  
 Angolare ±1°

↔ : 1.5 mm

↕ : 7.5 mm

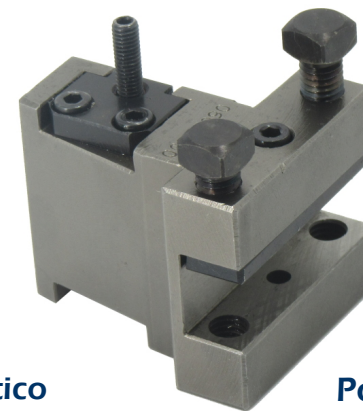




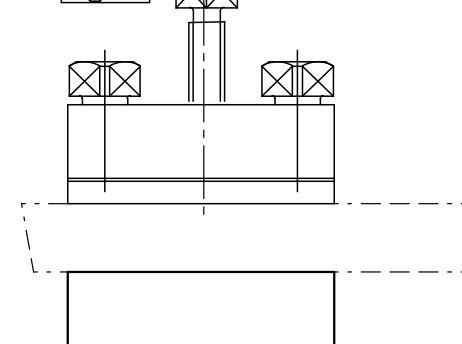
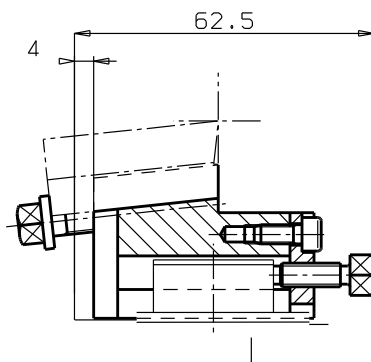
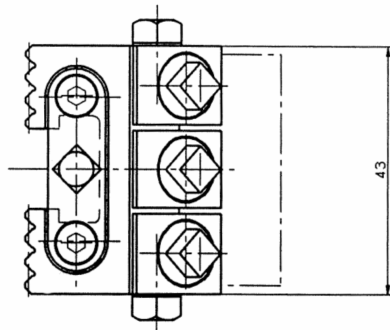
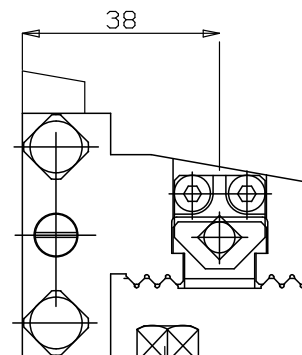
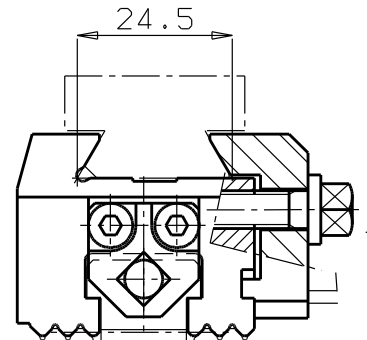
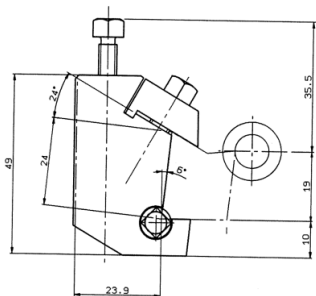
**5334011**  
Portautensile prismatico  
*Prismatic tool-holder*

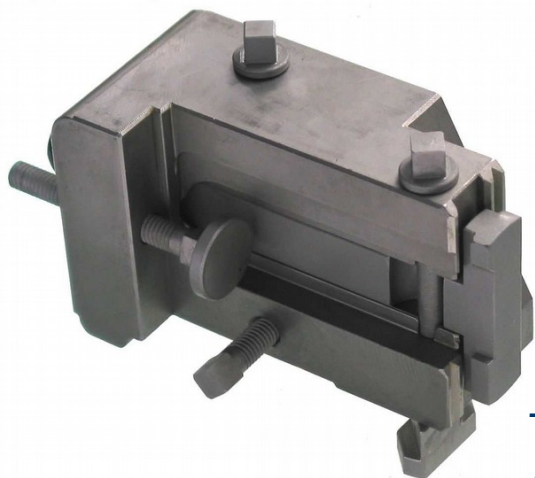


**5334007**  
Portautensile prismatico  
L=24,5  
*Prismatic tool-holder*  
L=24,5

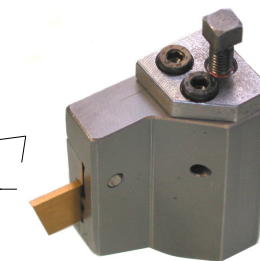
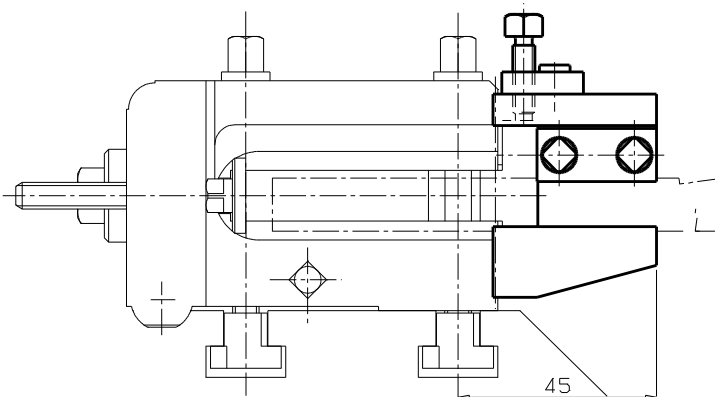


**5334006**  
Portabarretta 12x12  
*Bevel-stick tool-holder*  
12x12

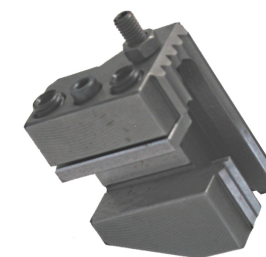
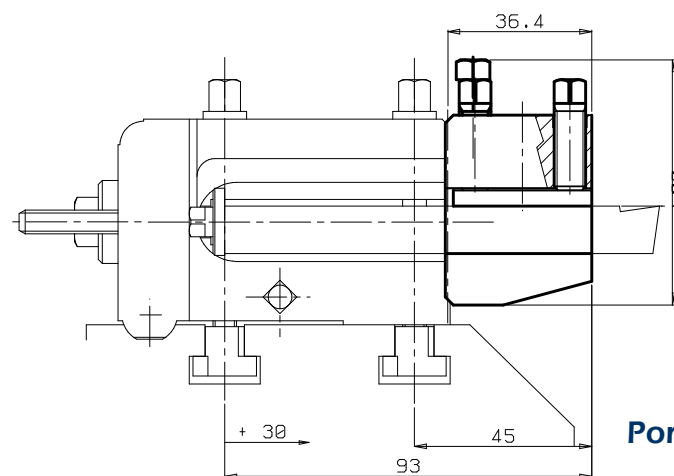
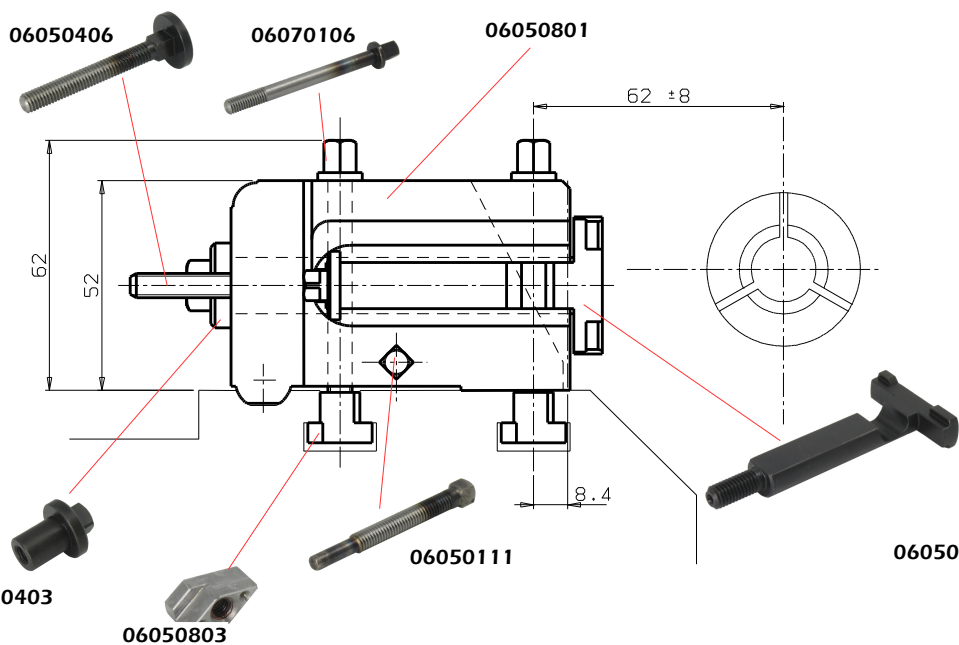




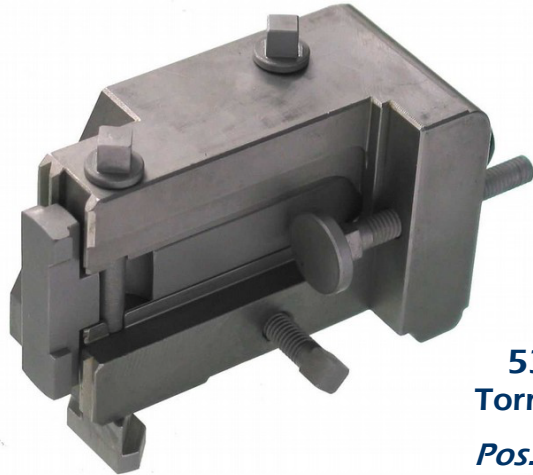
**5334010**  
Torretta pos.6  
*Pos.6 turret*



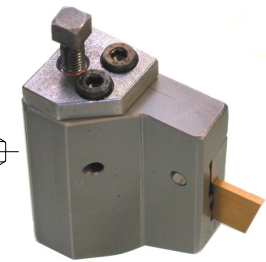
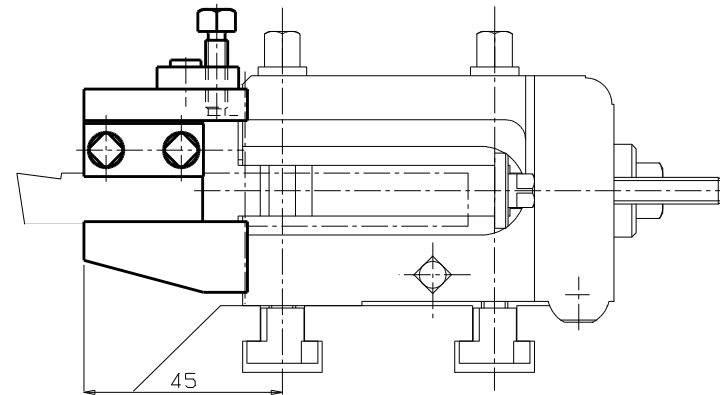
**06052700**  
Portalama da taglio  
empire PM12N  
*Cutting blade-holder  
Empire PM12N*



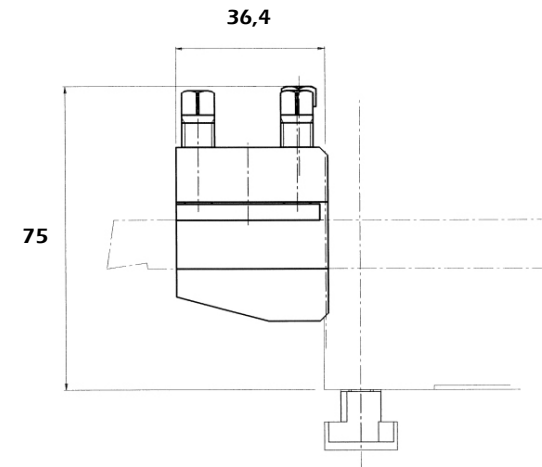
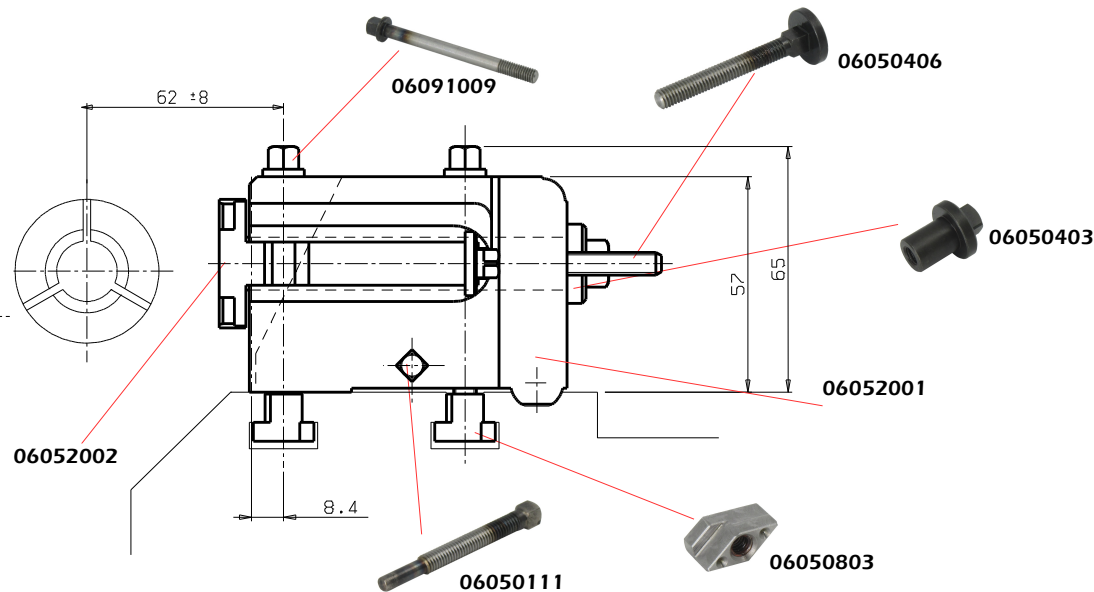
**5334012**  
Portautensile da taglio 12x12  
*Cutting tool-holder 12x12*



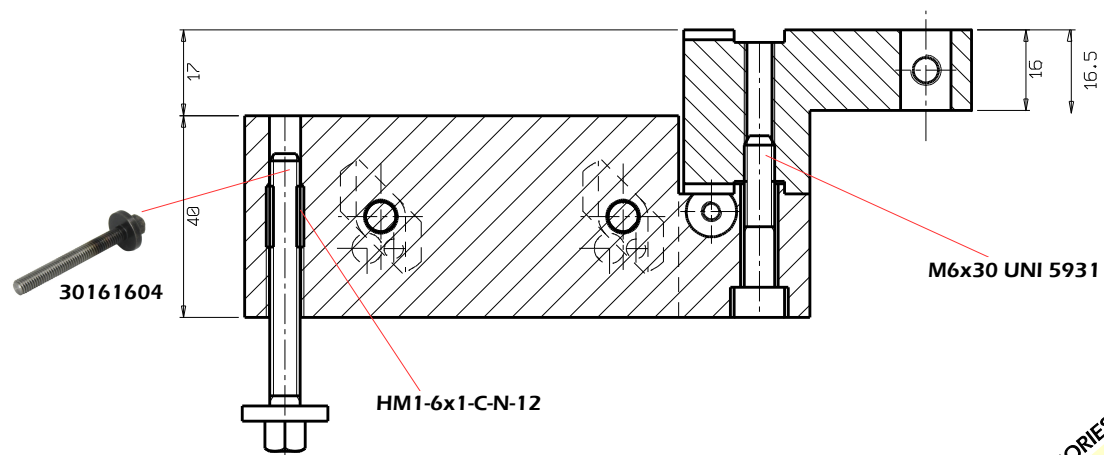
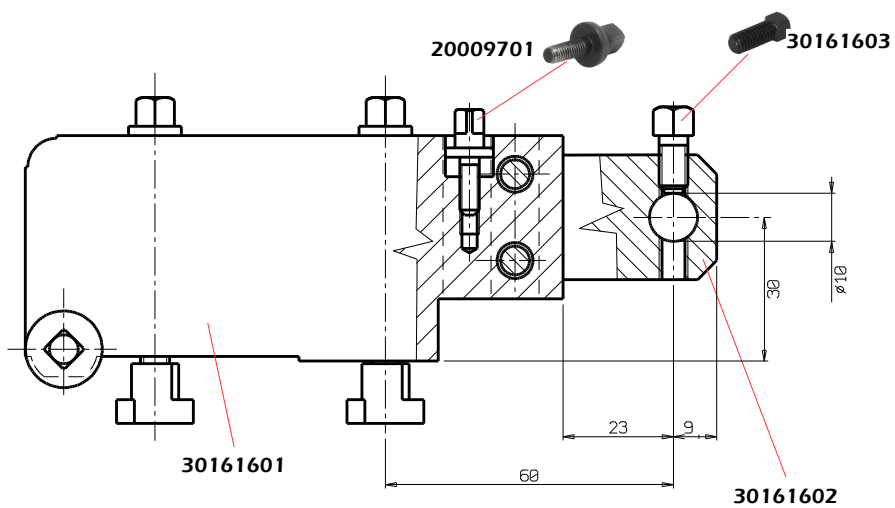
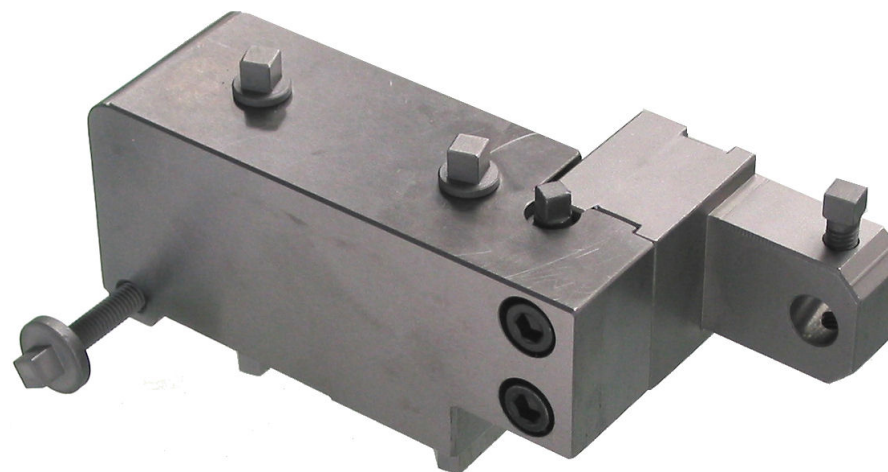
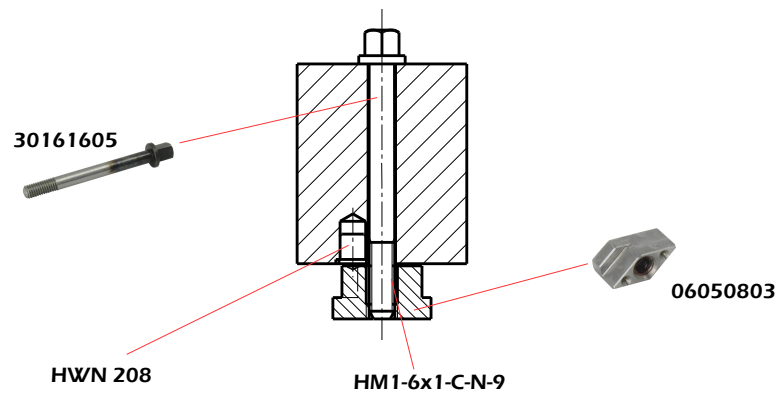
**5334020**  
Torretta pos.3  
*Pos.3 turret*

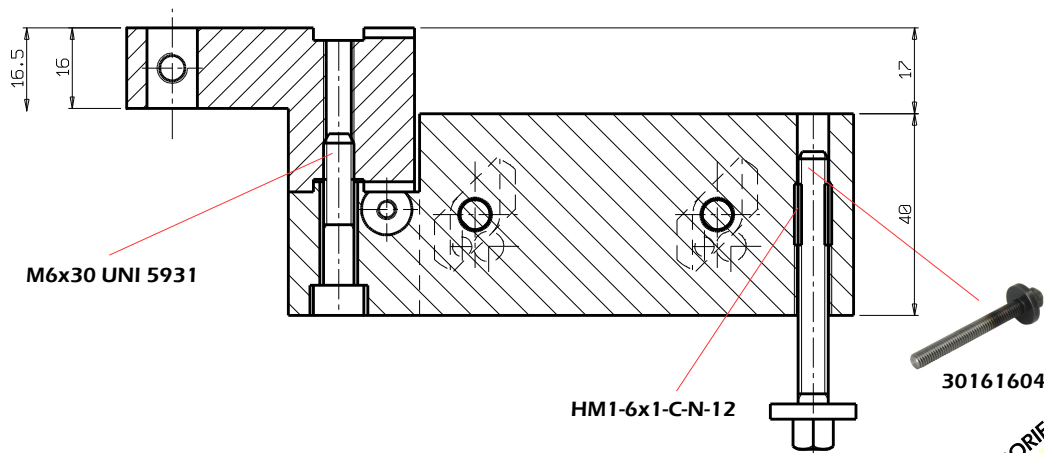
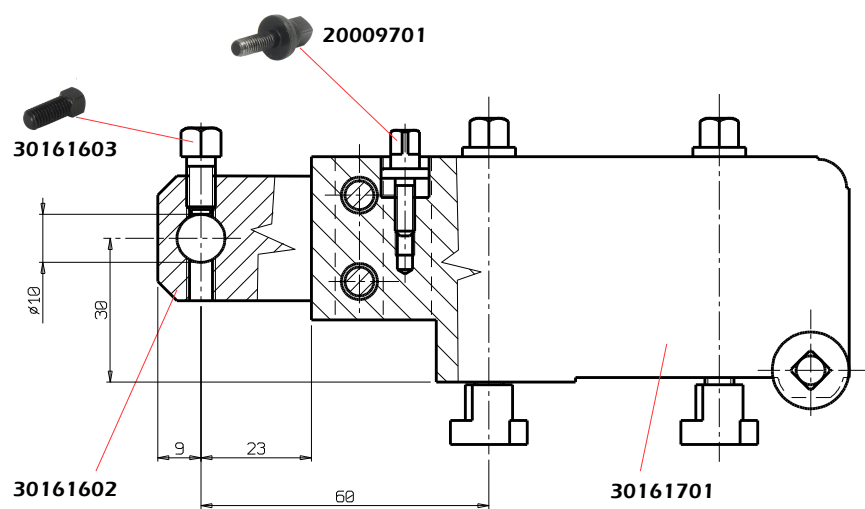
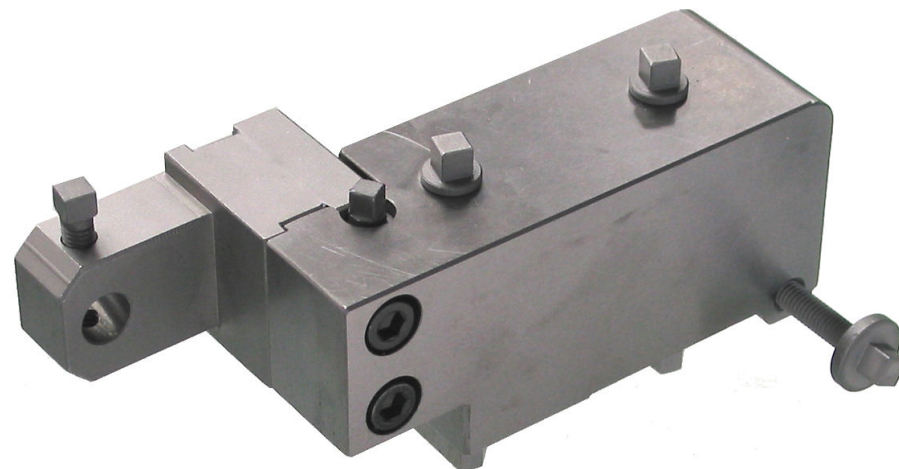
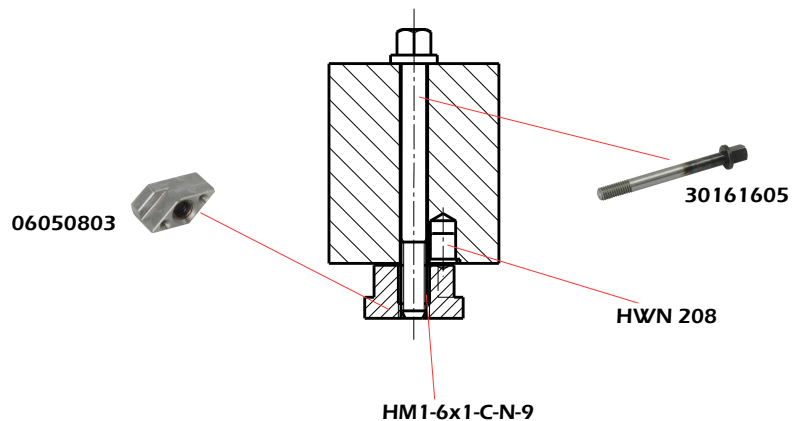


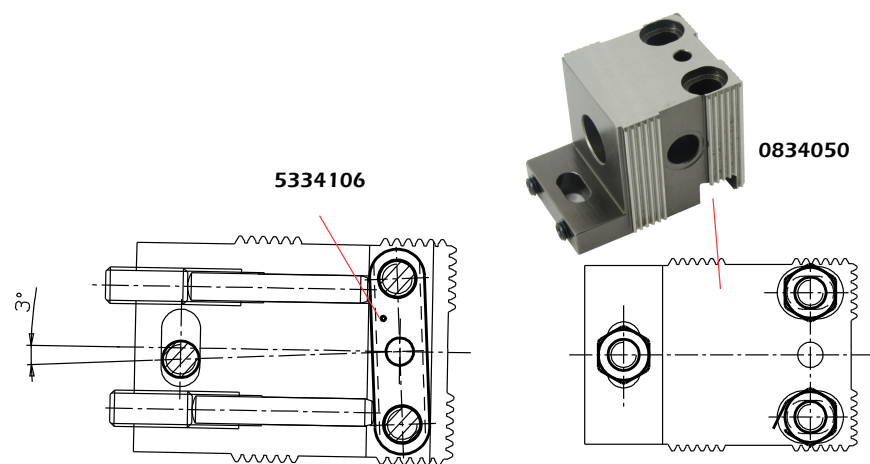
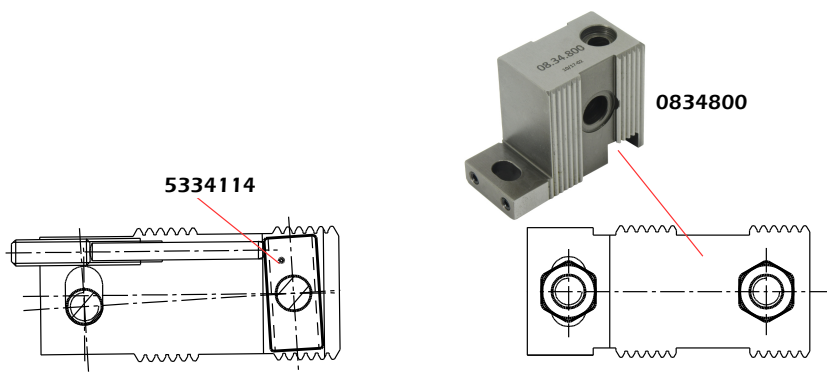
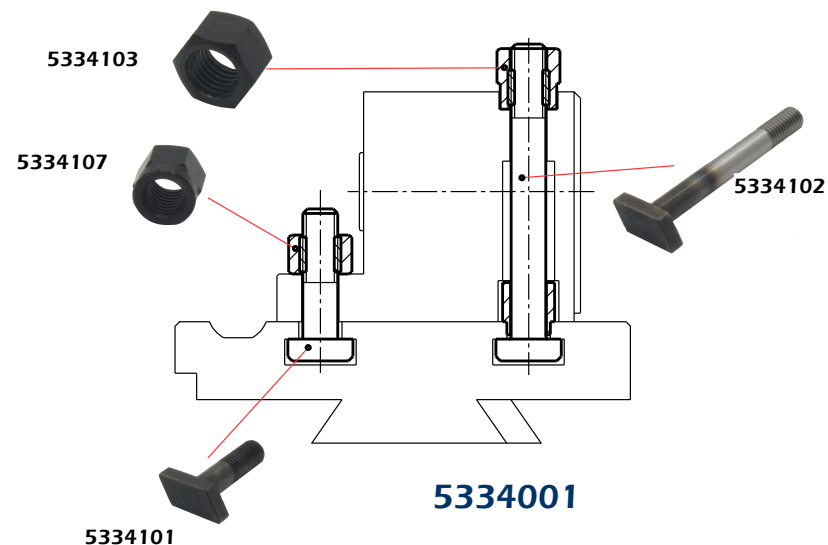
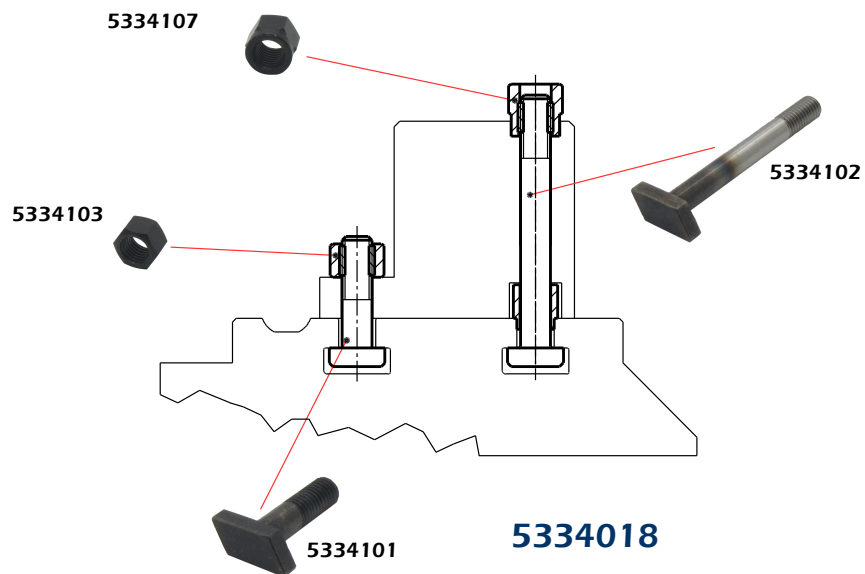
**06052700-3**  
Portalama da taglio  
empire PM12N  
*Cutting blade-holder  
Empire PM12N*



**5334022**  
Portautensile da taglio  
*Cutting tool-holder*









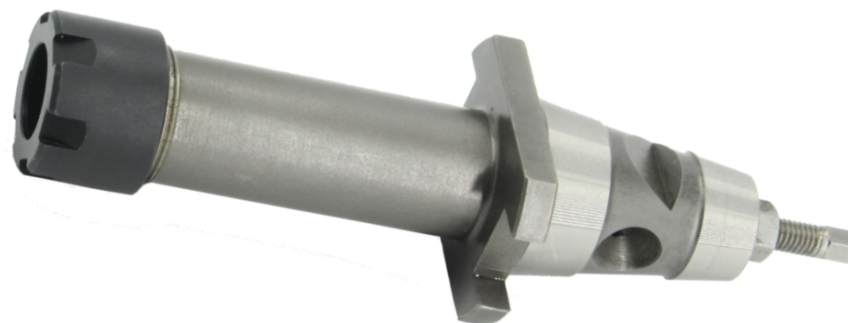
**5323010**  
ISO25 – ESX25  
Ø 10 Max



**5323012**  
ISO25 – ESX20  
Ø 16 Max



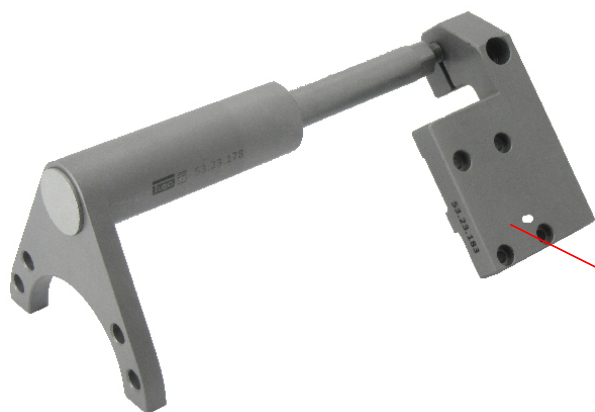
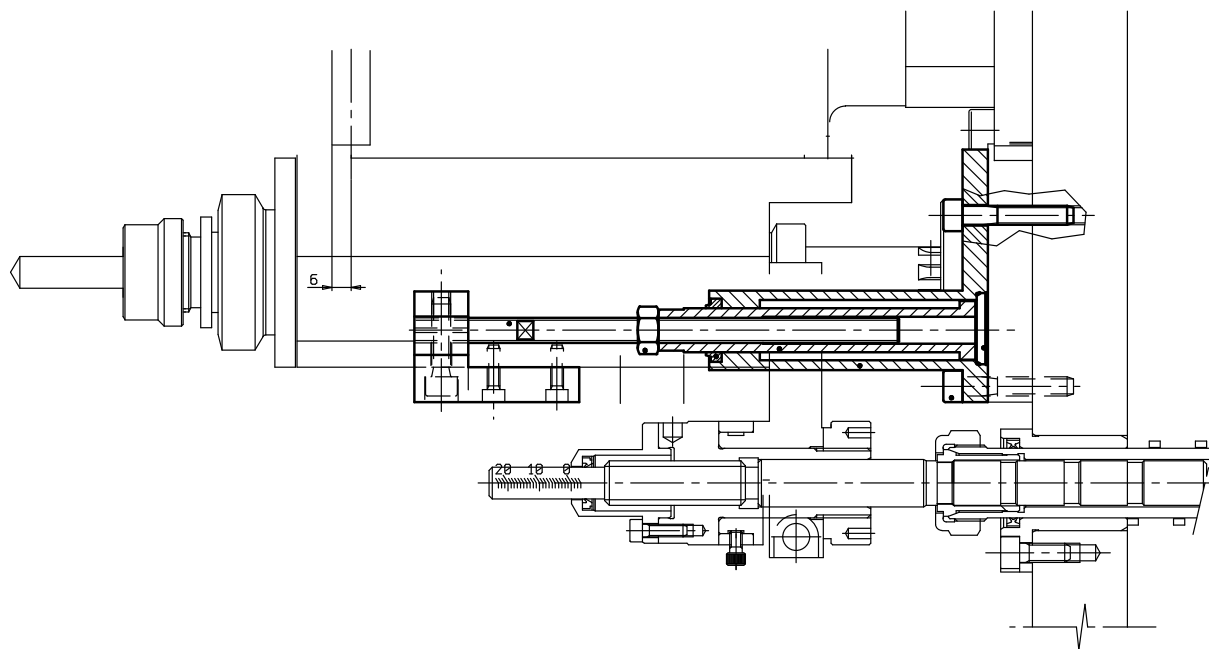
**5323011**  
ISO25 – ESX32  
Ø 20 Max



Versioni prolungate  
Special extended version

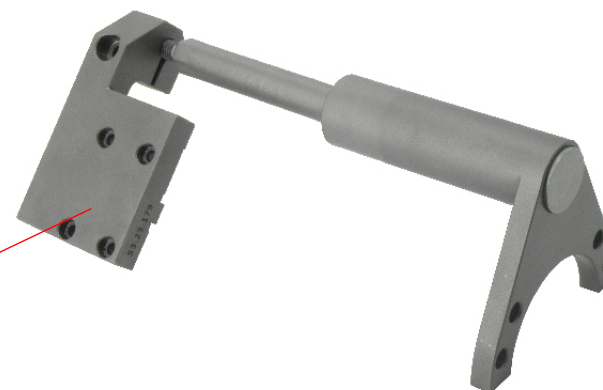
**5323026 ER8**  
**5323026B ER11**





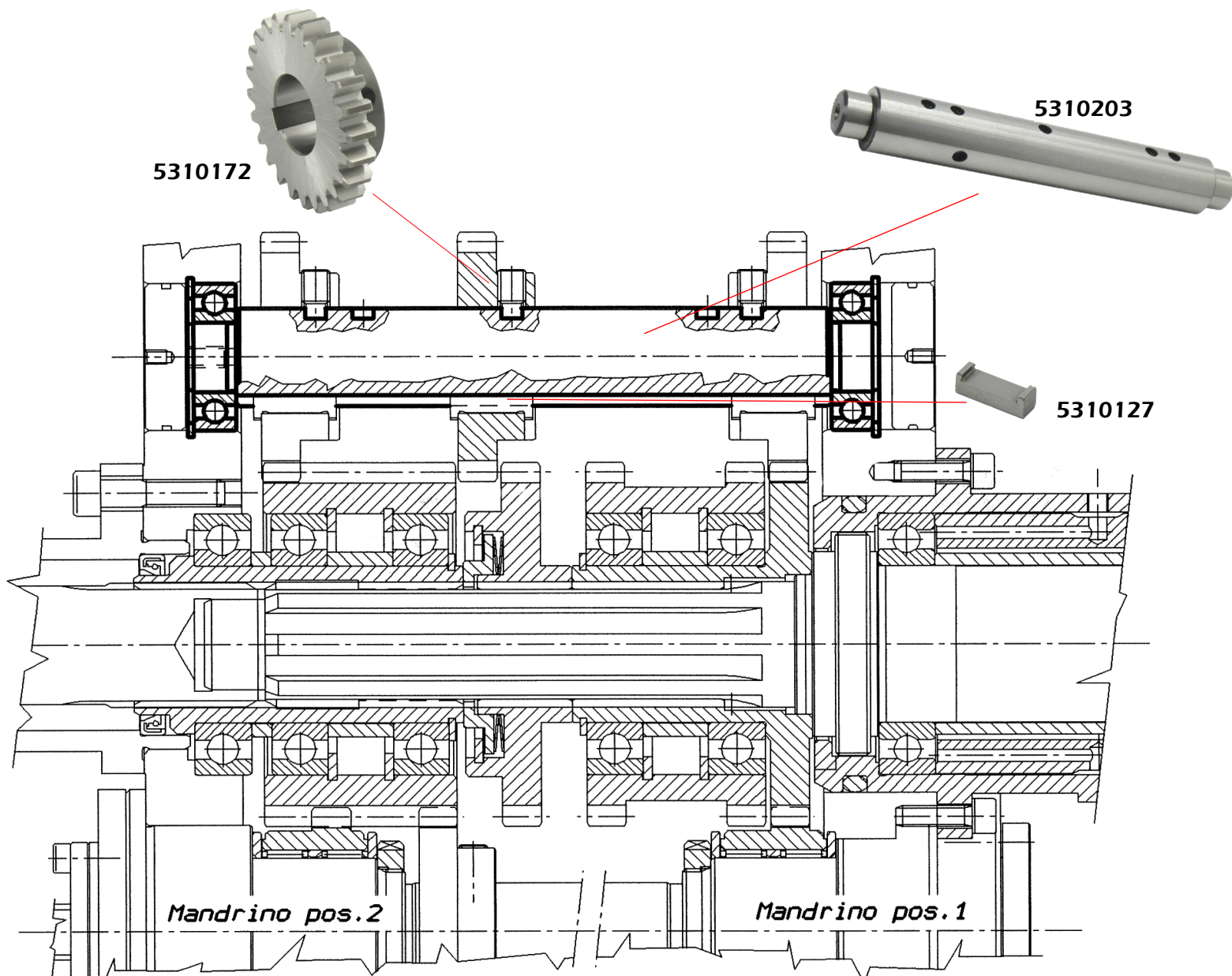
5323183

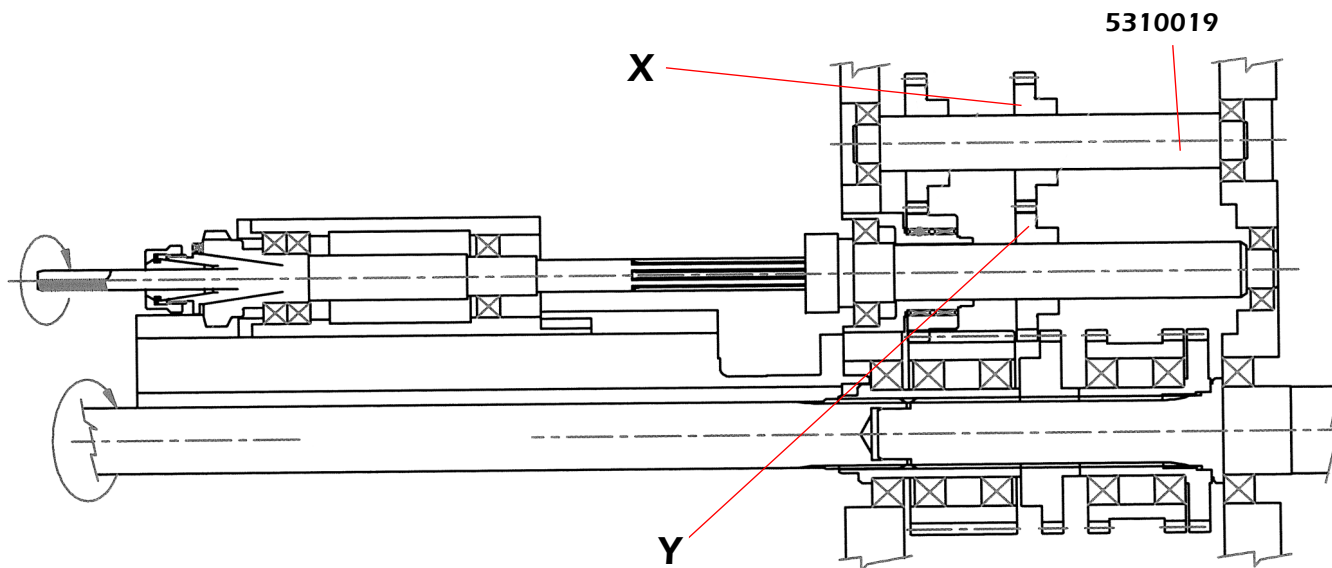
**5323025A**



5323179

**5323025B**





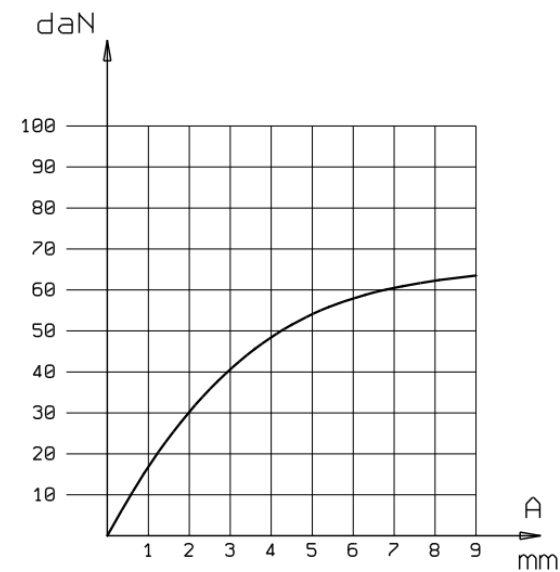
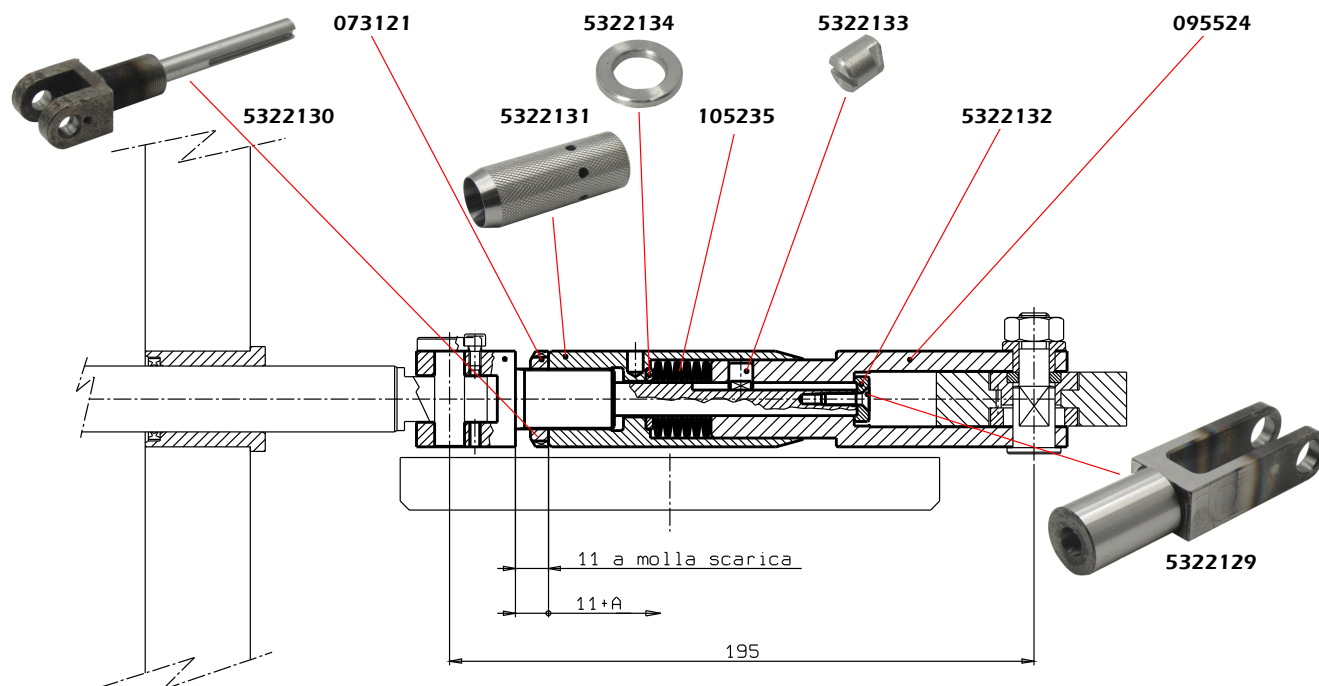
Ruote per rapporto foratura veloce / Ratio gears for high speed drilling

X		Y		Rapporto
Codice	Z	Codice	Z	
5310176	30	5310182	36	0,833
5310177	32	5310183	34	0,941
5310178	28	5310179	38	0,737
5310181	27	5310180	39	0,692
5310185	29	5310184	37	0,784
5310182	36	5310176	30	1,200
5310183	34	5310177	32	1,063
5310179	38	5310178	28	1,357
5310180	39	5310181	27	1,444
5310184	37	5310185	29	1,275

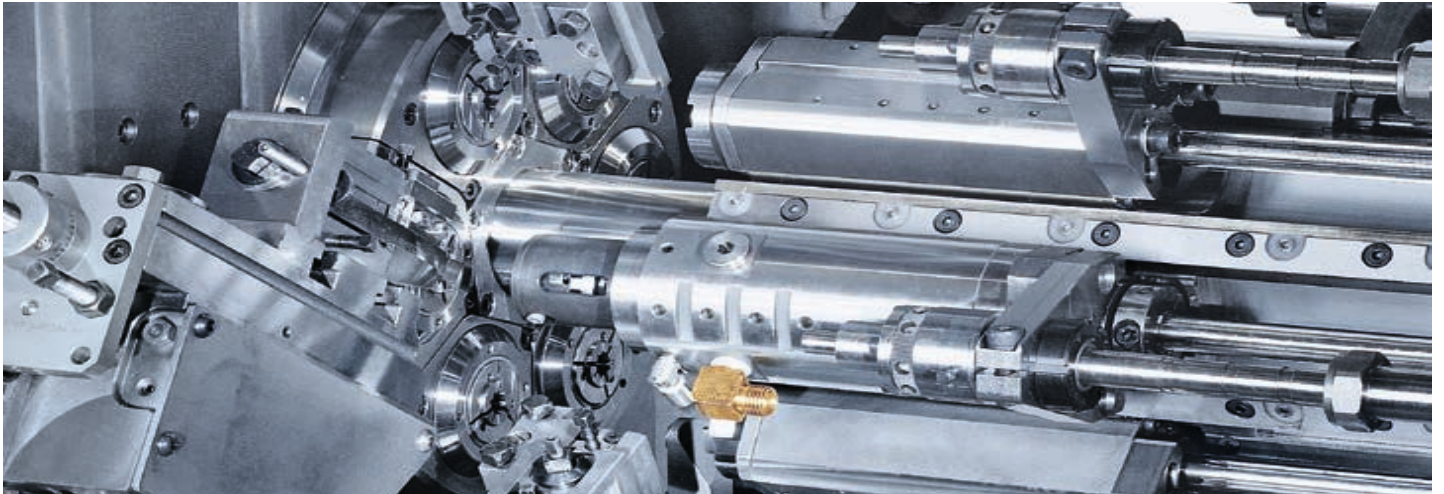


Da usarsi al posto della biella 5322118

To be used instead of rod 5322118







## **Apparecchi Attachments**

**Mandrini frontali rotanti**  
*Rotating toolspindle*

**Mandrino da ripresa pos.6 mecc. - idraulico**  
*Pos.6 mechanical-hydraulic pick-up attachment*

**Mandrino da ripresa idraulico pos.6**  
*Pos.6 hydraulic pick-up attachment*

**Freno per mandrino da ripresa**  
*Pos.6 pick-up brake*

**Slitta supplementare per la ripresa pos.6**  
*Pos.6 additional slide for back finishing*

**Gruppo a filettare con portamaschio-filiera**  
*Equipment for threading by tap or die holder*

**Gruppo filettatore**  
*Threading clutch assembly*

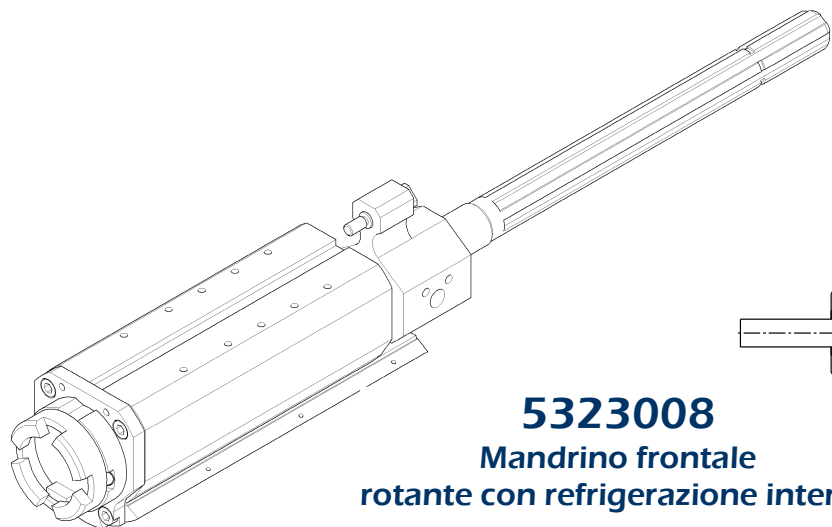
**Apparecchio brocciatore**  
*Broaching attachment*

**Fresatore frontale**  
*Frontal-milling attachment*

**Timbratore radiale**  
*Cross-marking attachment*

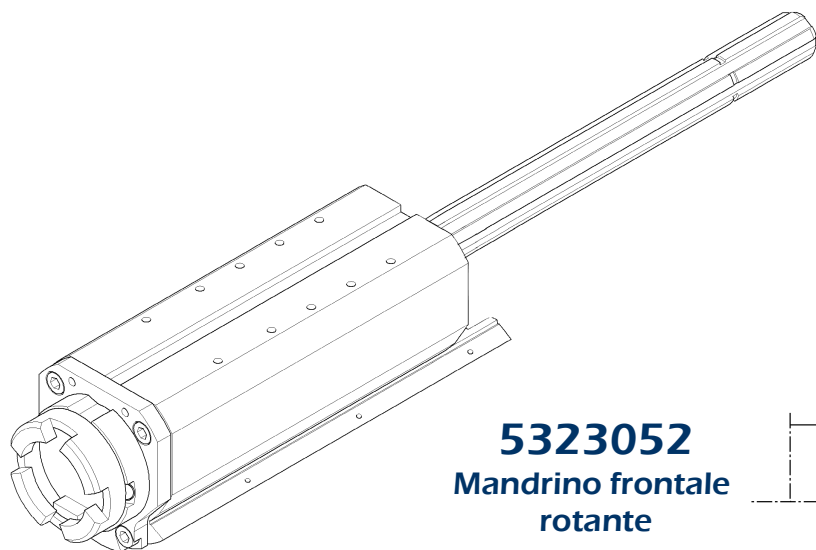
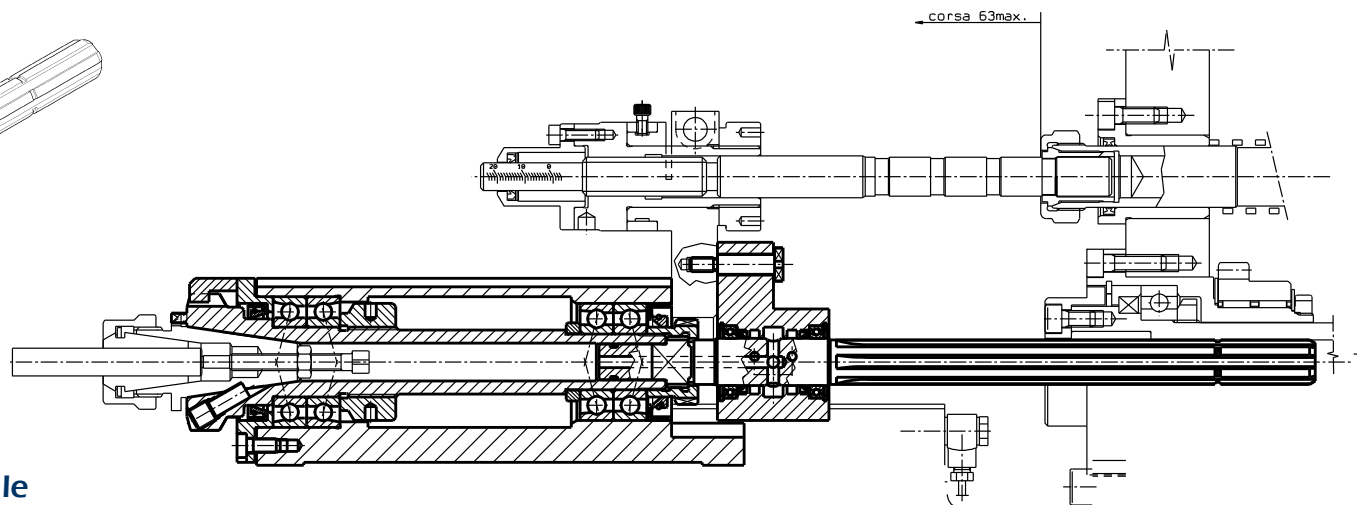
**Apparecchio fresatore di poligoni e filetti**  
*Polygon-generating and thread -milling attach.*

**Calibratore**  
*Shaving tool-holder*



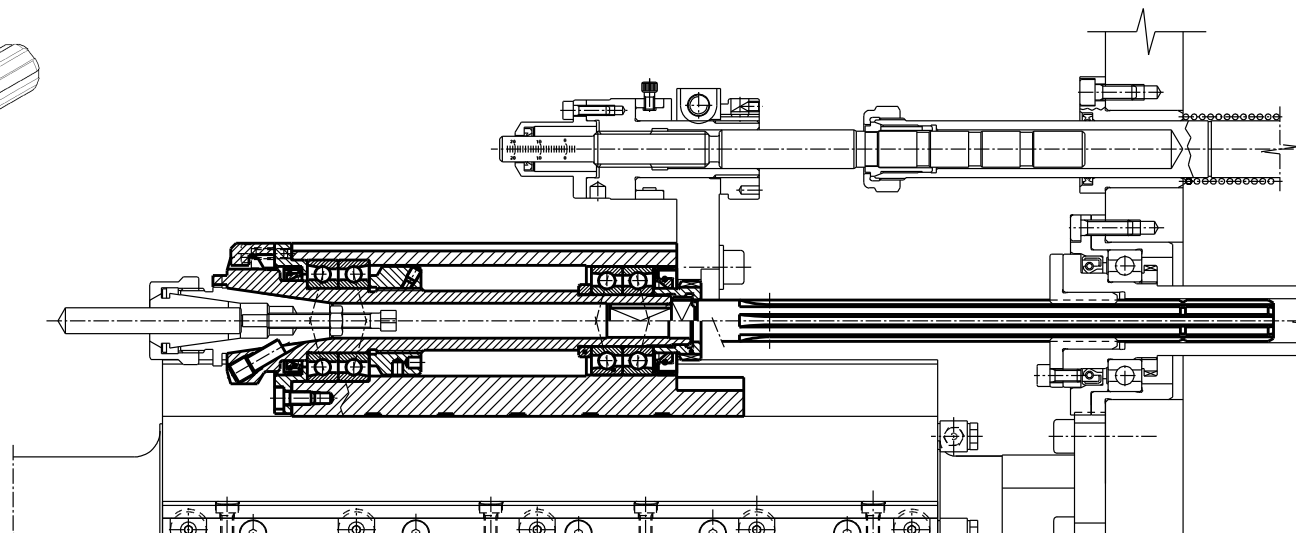
**5323008**  
Mandrino frontale  
rotante con refrigerazione interna

*Rotating toolspindle  
with internal cooling*



**5323052**  
Mandrino frontale  
rotante

*Rotating toolspindle*





### Accessori disponibili su richiesta

*Available on request*

Codice / Code	Descrizione / Description
30161200	Giunto di refrigerazione <i>Joint for internal cooling</i>
4551009	Fermo per pick-up <i>Pick-up stop</i>
30161300	Dispositivo di allineamento <i>Alignment device</i>
	Centralina idraulica <i>Hydraulic unit</i>

Questa è la prima versione del mandrino pick-up: ha bloccaggio meccanico tramite rondelle a molla e sganciamento idraulico. L'attacco pick-up viene utilizzato in posizione di taglio slitta frontale. Il suo mandrino ruota alla stessa velocità della barra, bloccando la parte con la pinza durante il taglio.

Sempre con la parte nella pinza, va indietro, permettendo il posizionamento del portautensili da ripresa nella parte anteriore.

Andando avanti con lo strumento da ripresa si fa la finitura della parte posteriore.

L'ultima fase è l'apertura e l'espulsione del pezzo: l'apertura della pinza è completamente idraulica.

Nel caso manchi in macchina possiamo fornire l'unità idraulica.

Possiamo inoltre fornire nuove attrezzature complete o pezzi di ricambio per i vostri pick-up originali.

*This is the first version of the pick-up spindle, it has mechanical clamping by spring washers and unclamping by hydraulics.*

*The pick-up attachment is used on the cutting-off position frontal slide. Its spindle rotates at the same speed than the bar, it clamps the part with the collet during the cutting-off.*

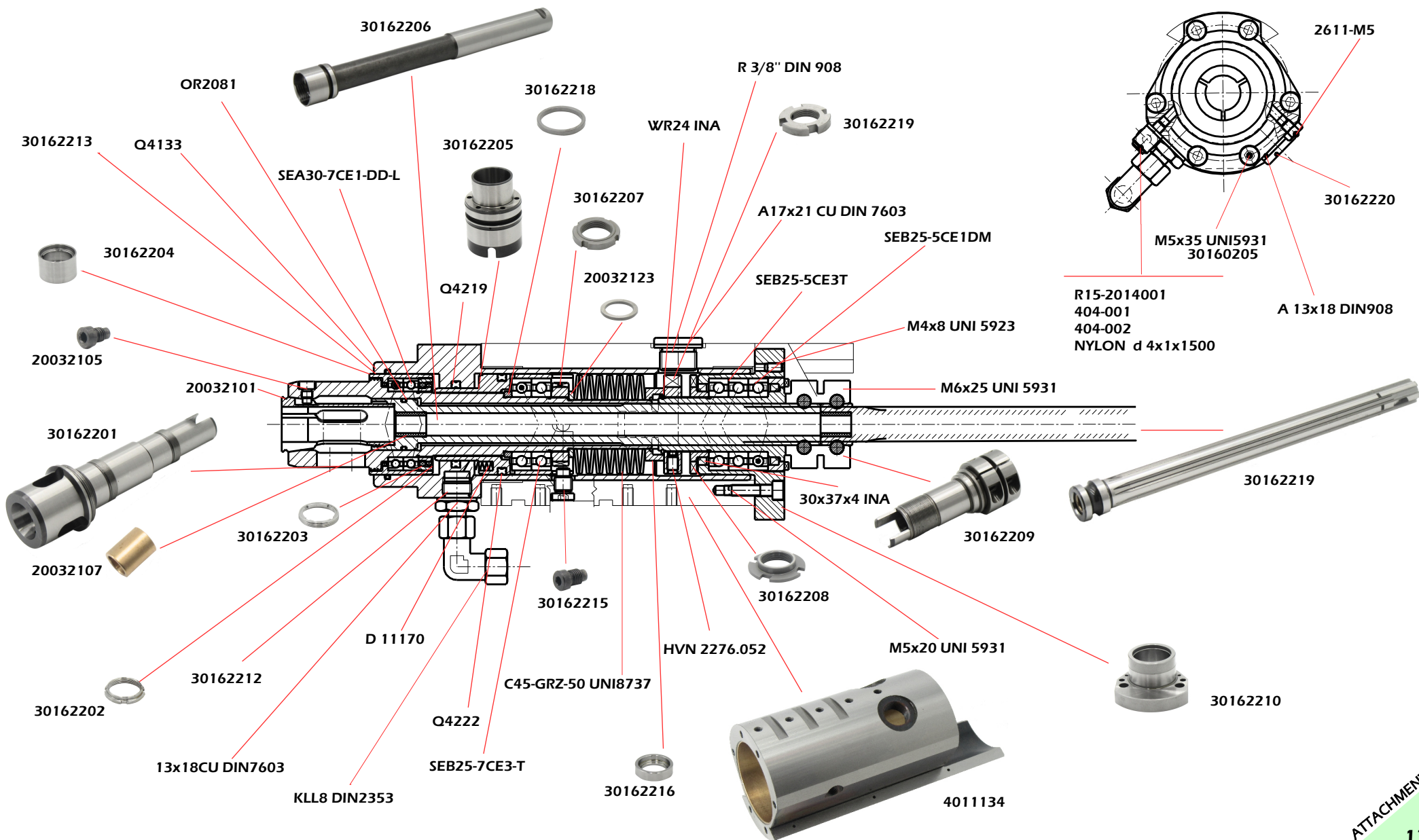
*Having the part still clamped by the collet, it goes backward, allowing the positioning of the reprise tool-holder in front of the part. Going forward against the reprise tool, it makes the finishing of the part on the back side.*

*The last phase is the opening of the collet and the expulsion of the part. The opening of the collet is fully hydraulic.*

*We can supply the hydraulic unit in case it is missing in the machine.*

*We can supply new complete attachments or spare parts for your original attachments or we can rebuild your old attachments.*







**Accessori disponibili su richiesta**  
*Available on request*

Codice / Code	Descrizione / Description
30161200	Giunto di refrigerazione <i>Joint for internal cooling</i>
4551009	Fermo per pick-up <i>Pick-up stop</i>
30161300	Dispositivo di allineamento <i>Alignment device</i>
2340H013/A+RID	Centralina idraulica per apertura/chiusura pinza con regolazione della pressione di serraggio <i>Hydraulic unit for collet control with adjustable clamping pressure.</i>

Questa è l'ultima versione del mandrino pick-up: ha sia il serraggio che lo sganciamento idraulico. L'attacco pick-up viene utilizzato in posizione di taglio slitta frontale. Il suo mandrino ruota alla stessa velocità della barra, bloccando la parte con la pinza durante il taglio. Sempre con la parte nella pinza, va indietro, permettendo il posizionamento del portautensili da ripresa nella parte anteriore. Andando avanti con lo strumento da ripresa si fa la finitura della parte posteriore. L'ultima fase è l'apertura e l'espulsione del pezzo: l'apertura e la chiusura della pinza è completamente idraulica. Nel caso manchi in macchina possiamo fornire l'unità idraulica. Possiamo inoltre fornire nuove attrezzature complete o pezzi di ricambio per i vostri pick-up originali.

*This is the last version of the pick-up spindle, it has both clamping and unclamping by hydraulics.*

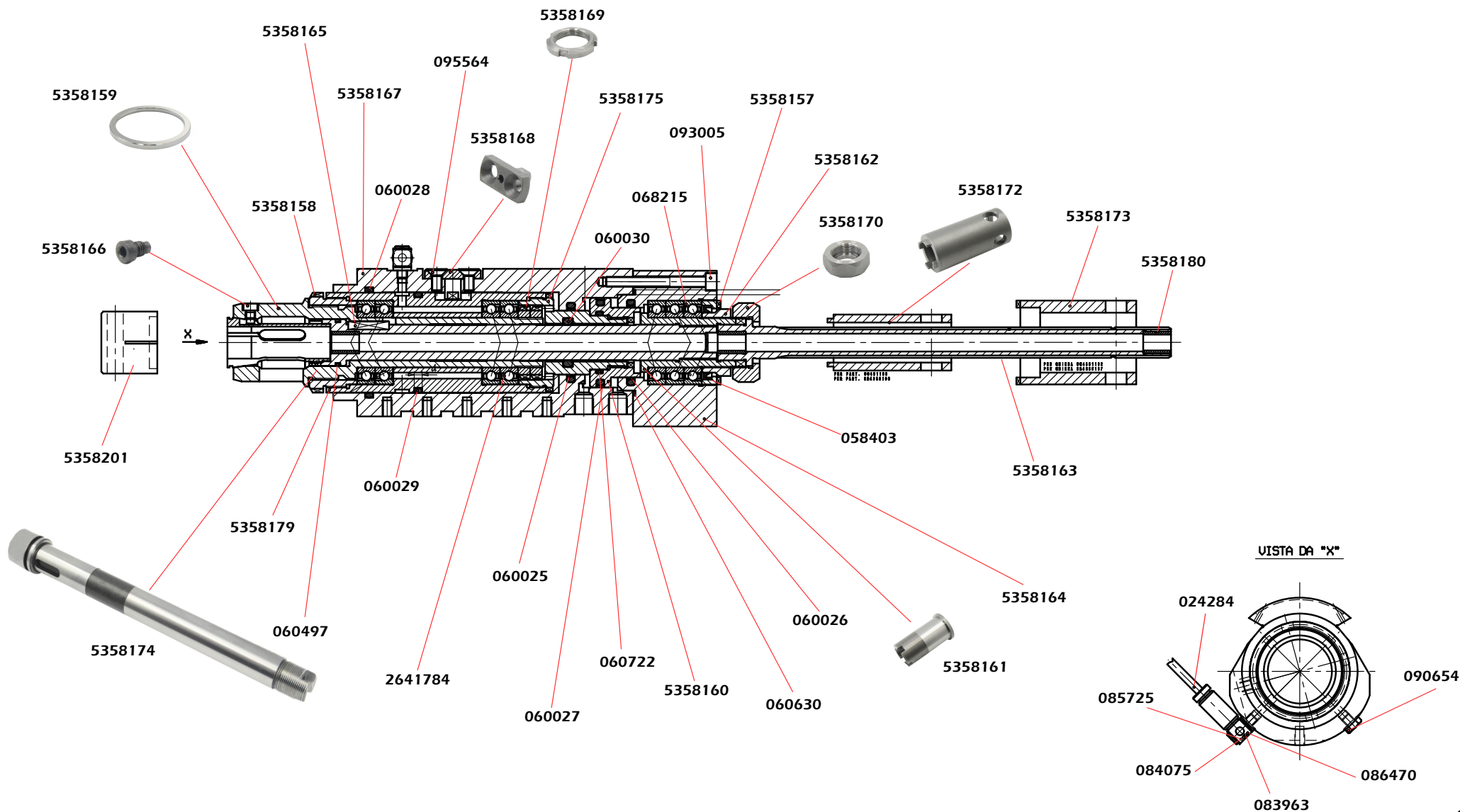
*The pick-up attachment is used on the cutting-off position frontal slide. Its spindle rotates at the same speed than the bar, it clamps the part with the collet during the cutting-off.*

*Having the part still clamped by the collet, it goes backward, allowing the positioning of the reprise tool-holder in front of the part. Going forward against the reprise tool, it makes the finishing of the part on the back side.*

*The last phase is the opening of the collet and the expulsion of the part. The opening and closing of the collet is fully hydraulic.*

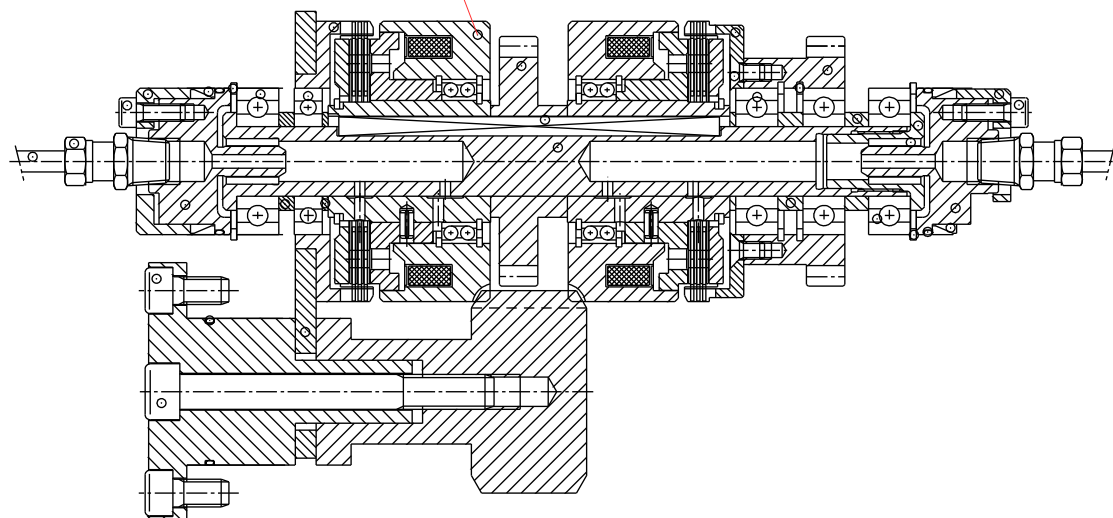
*We can supply the hydraulic unit in case it is missing in the machine.*

*We can supply new complete attachments or spare parts for your original attachments or we can rebuild your old attachments*

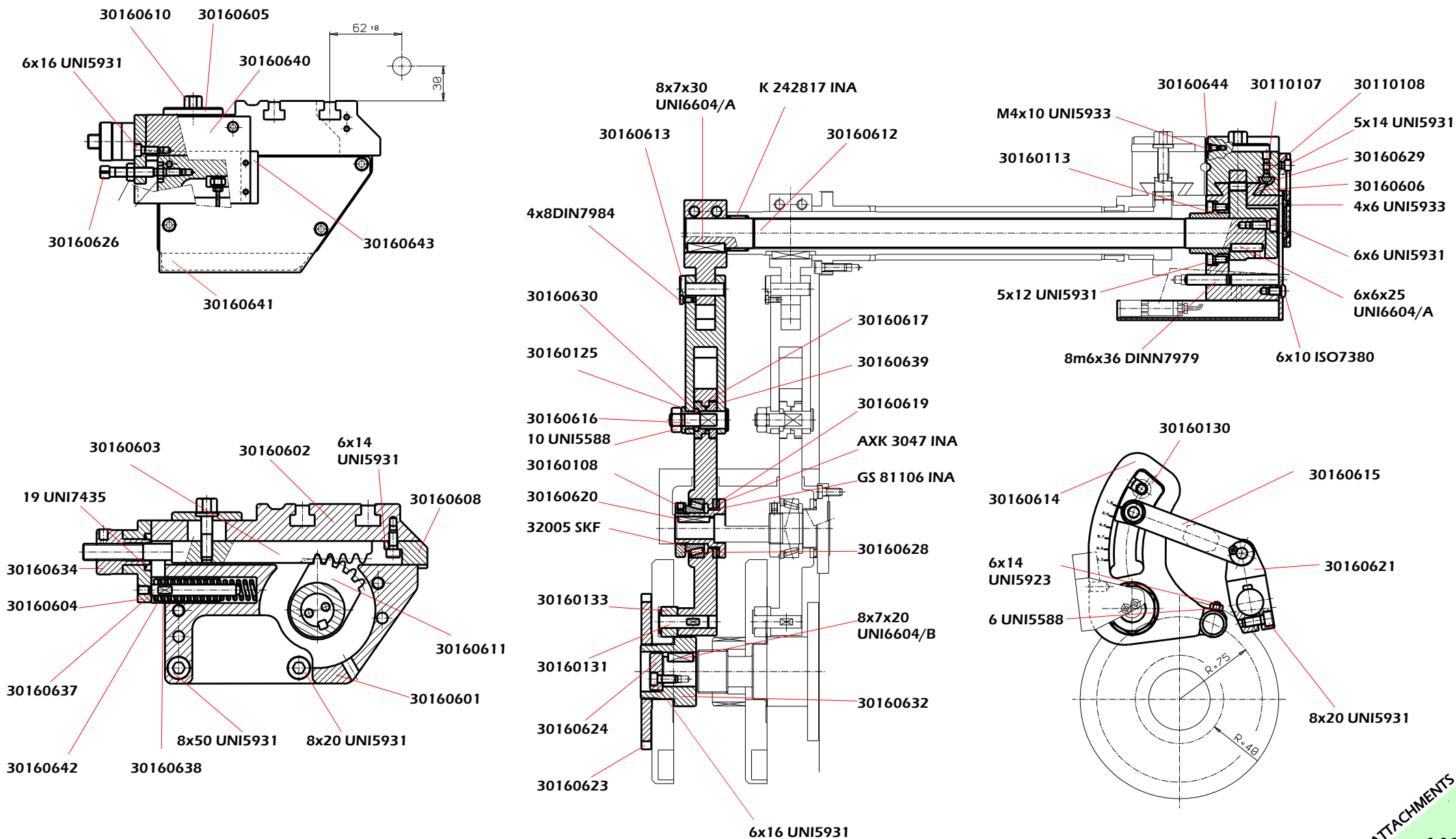


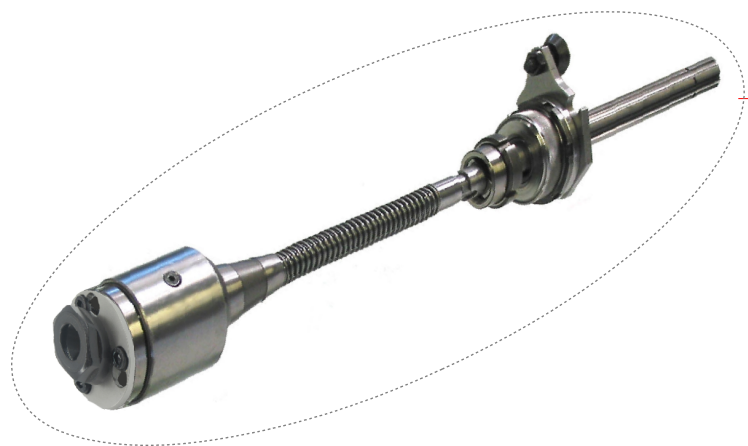


**FORT 11**  
**20004328**



Velocità massima mandrini principali "g/min"	Tempo minimo di produzione "s"
Max. toolspindle rotating speed "g/min"	Min. production time "s"
2000	1,5
3000	2
4000	3
5000	4





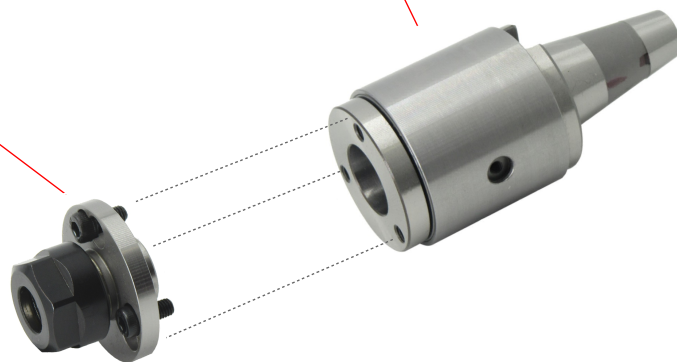
5343001

06103300

Testina a estrazione  
*Sliding tap-holder*

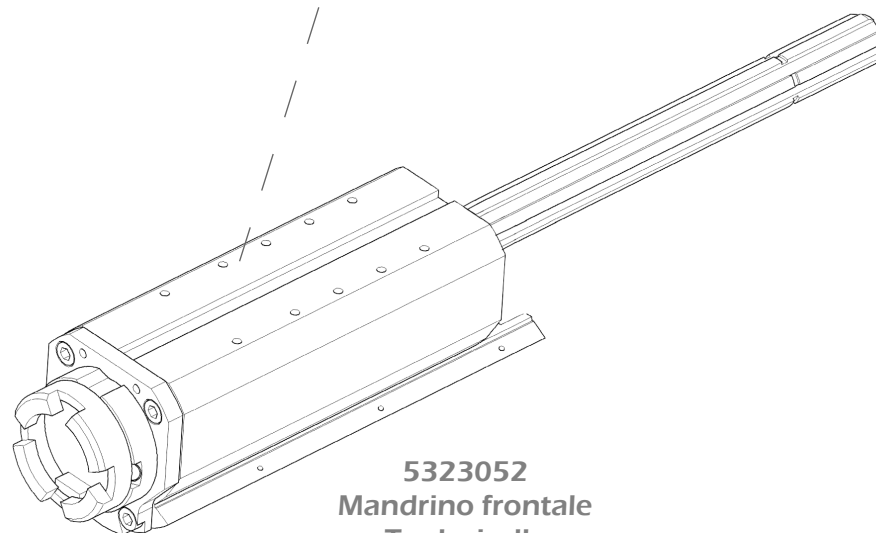
06104200

Portamaschio  
*Tap-holder*



06103200\*

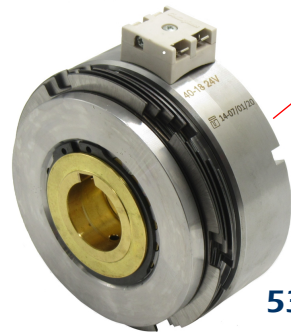
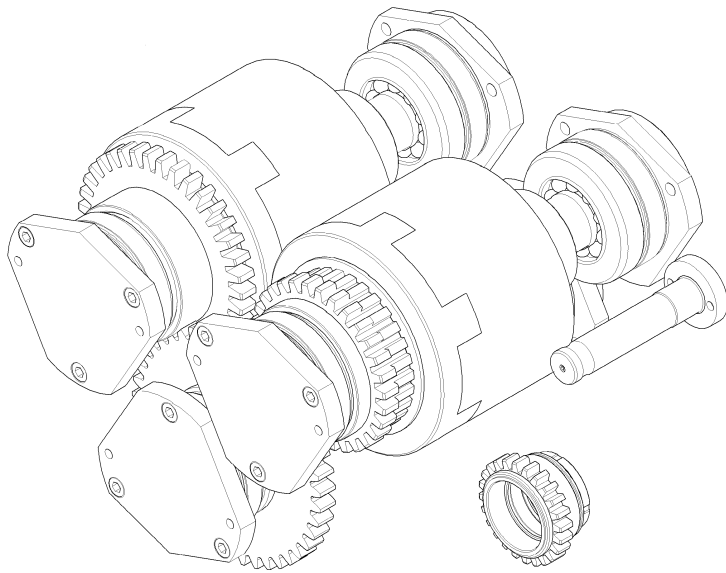
Gruppo interno al mandrino  
*Internal unit with  
16 mm max stroke*



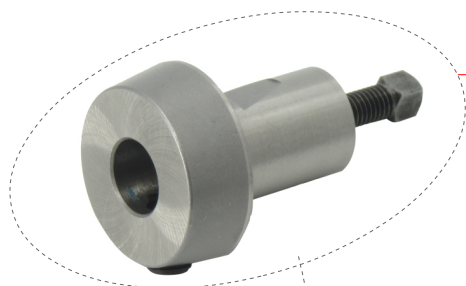
5323052  
Mandrino frontale  
*Toolspindle*

\*Disponibile anche con corsa max 25 mm, codice 06104800

\*Available with 25 mm max stroke on request, code 06104800

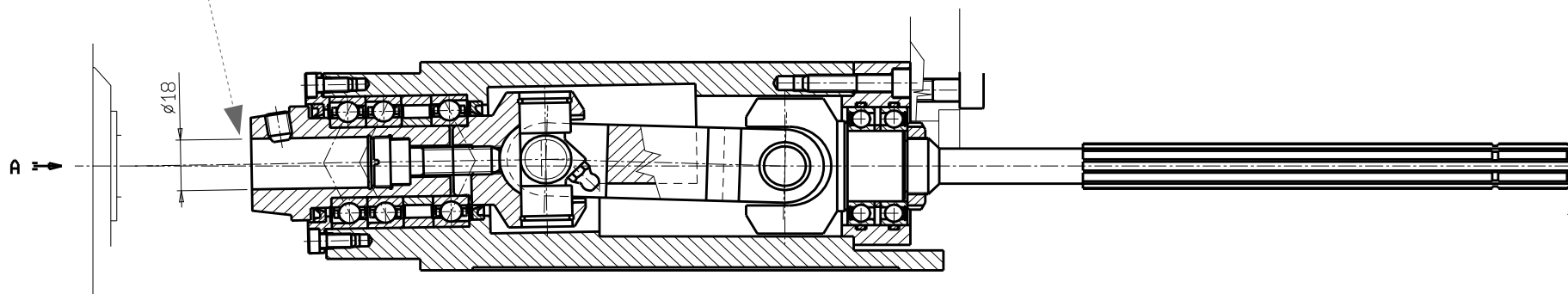


5325120

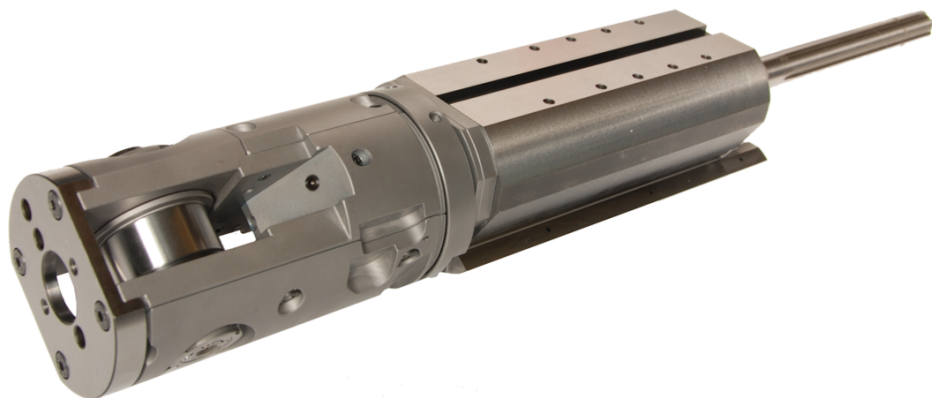


**33130300**  
Portabroccia per interni (L=42,5mm)  
*Die-holder for internal broaching (L=42,5 mm)*

**33130400**  
Portabroccia per esterni (L=17 mm)  
*Die-holder for external broaching (L=17 mm)*







### Accessori disponibili su richiesta / *Available on request*

Codice / Code	Descrizione / Description
5311114M	Set di lardoni modificati <i>Set of modified gibs</i>
5311113M	Staffa modificata <i>Modified bracket</i>
20091827 chiave per ghiera 20091824 chiave di servizio CH.4	Set chiavi di smontaggio e registrazione <i>Set of tools</i>
35090110 20091806	Set distanziali <i>Set of rings</i>
350901114	Boccola guidabarra <i>Guide bushing</i>
35094100	Gruppo di lubrificazione <i>Lubrication unit</i>
30161300	Rifasatore <i>Phasable joint</i>

Siamo in grado di fornire l'apparecchiatura nuova, copia dell'ultima versione GR0 Saco.

Ogni singolo componente è intercambiabile con quelli originali, ciò ci permette di revisionare i vostri fresatori Saco o semplicemente fornirvi i ricambi per farlo.

E' possibile la registrazione trasversale del pacco fresa di +/-0,5mm, senza più doverlo smontare per sostituire i distanziali.

ATTENZIONE: per poterlo montare va rimossa la slitta frontale della stazione prescelta e vanno modificati i lardoni; noi possiamo offrirvi il set di lardoni già modificati.

*We can supply the complete new attachment, based on GR0 Saco model.*

*Every single part is interchangeable with the original ones, and that allows us to repair old original units with our spare parts.*

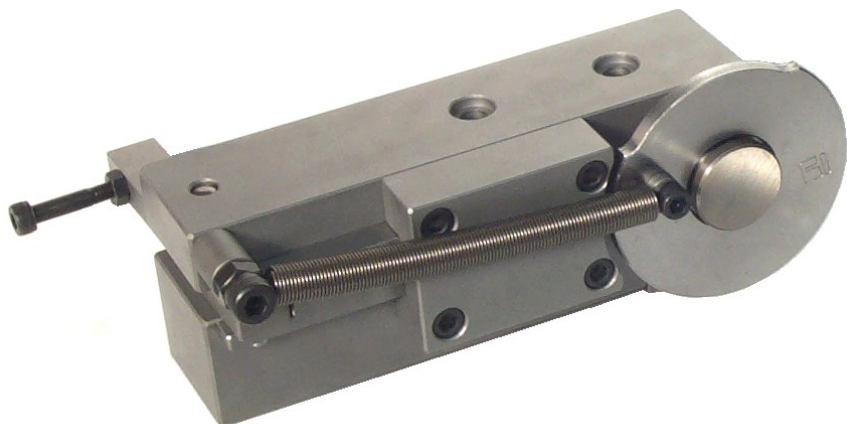
*We supply the latest model, in which it is possible to adjust the cross position of the milling disk, without taking it off.*

*ATTENTION: to install the attachment you need to remove the machine frontal slide and to modify the slide gibs. Otherwise we can supply a set of modified gibs.*

#### CARATTERISTICHE TECNICHE

- posizioni di montaggio / *mounting positions*
- velocità massima del mandrino / *max machine rotating speed*
- distanza massima tra pinza e fresatore / *max distance between collet and milling unit*
- Corsa massima / *max stroke*
- diametro massimo di fresa / *max milling disk dia.*
- diametro massimo del pezzo / *max part dia.*
- rapporto di fresatura / *milling ratio:*

tutte / all  
4500 rpm  
99mm  
35mm  
63mm  
18mm  
0,267

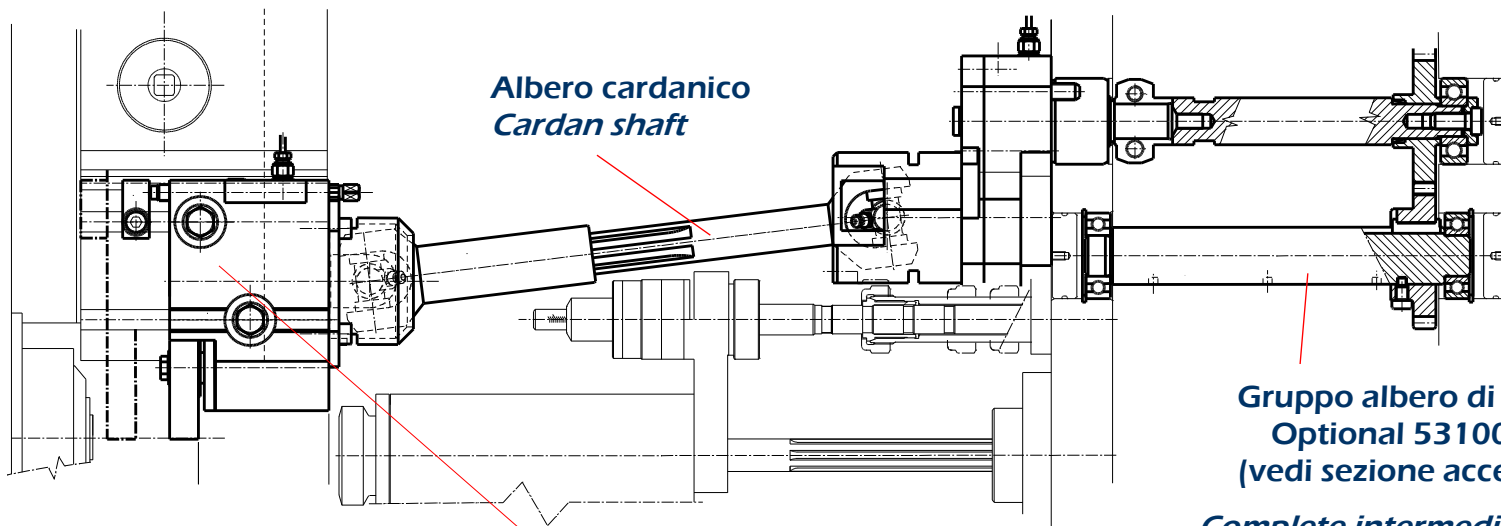


### Dischi disponibili grezzi o con incisione *Blank or engraved disks*

Codice / Code	Descrizione / Descriptions
G3L011	Rullo marcatore spessore 6 mm <i>6 mm wide disk</i>
G3L011/12	Rullo marcatore spessore 12 mm <i>12 mm wide disk</i>
G3L011/15	Rullo marcatore spessore 15 mm <i>15 mm wide disk</i>
G3L/011-RPL	Rullo marcatore a caratteri mobili <i>Disk with interchangeable letters</i>
G3L/011-CHR	Carattere mobile per rullo marcatore <i>Interchangeable letter</i>

Questo accessorio viene utilizzato per marcare i componenti in modo molto semplice e veloce, si basa su una logica completamente meccanica. Con il nostro timbratore, la slitta trasversale si muove in avanti fino a quando il disco inciso colpisce il componente. A causa dell'attrito tra loro, il disco inizia a girare e segnare il componente. Dopo una rotazione l'incisione è finita e un perno di bloccaggio ferma il disco in una posizione speciale, dove non può toccare nuovamente il componente. Quando la slitta trasversale ritorna indietro, un perno adeguato, fissato sulla parete della macchina, sblocca il disco e la molla lo porta alla sua posizione di partenza. Possiamo fornire i dischi in bianco o incisi, seguendo i requisiti del cliente. Lo stesso accessorio può essere smontato e rimontato al contrario per adattarsi a tutte le postazioni della macchina. Ora è anche possibile montare un disco con lettere intercambiabili.

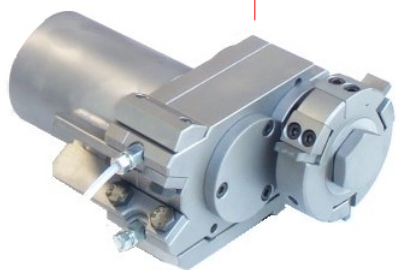
*This attachment is used to mark the components in a very simple and quick way, it is based on a completely mechanical logic. After mounting the attachment on the slide, the cross slide moves forward till the engraved disk hits the component. Because of the friction between the disk and the component, the disk starts to turn and mark the component. After one rotation engraving is over and a locking pin stops the disk in a special position, where it cannot touch the component again. When the cross slide returns back, a proper pin, fixed on the wall of the machine, unlocks the disk, and the spring takes it to its start position. We can supply blank disks or engraved disk, following customer's requirements. The same attachment can be taken apart and re-assembled the other way round in order to fit all the stations of the machine. Now it is also possible to fit a disk with interchangeable letters.*



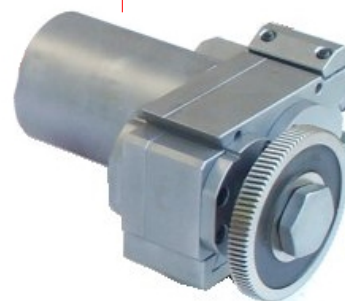
**Albero cardanico**  
*Cardan shaft*

**Gruppo albero di rinvio**  
**Optional 5310019**  
(vedi sezione accessori)

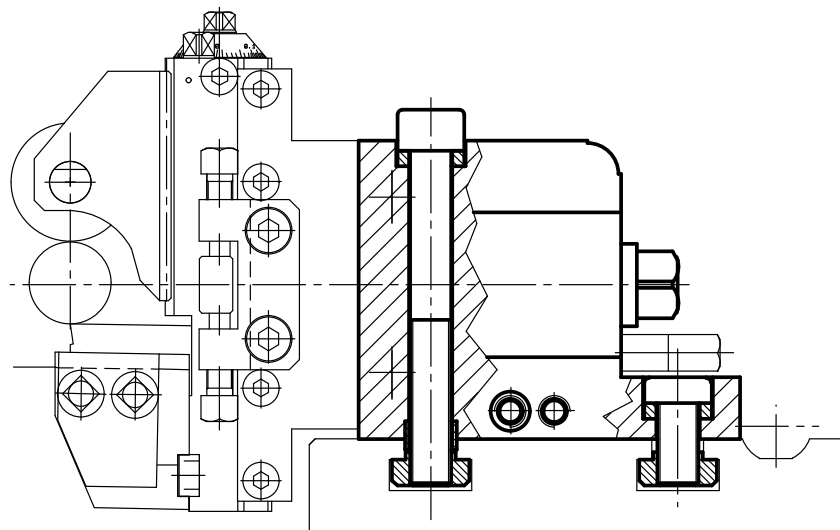
**Complete intermediate shaft**  
**Optional 5310019**  
(see "accessories" section)



**G1D/2B**  
Scatola portafresa per poligonatura  
Rapporto 2:1  
*Polygon generating tool-box*  
*Ratio 2:1*



**G1D/2C**  
Scatola portafresa per fresatura filetti  
Rapporto 1:1  
*Thread-milling tool-box*  
*Ratio 1:1*



Il calibratore è utilizzato per avere un diametro molto preciso.

Può essere utilizzato su qualsiasi slitta radiale.

Deve essere completato dal cliente da un rullo sul perno in carburo nella parte superiore e da un inserto da taglio bloccato nella parte inferiore.

*The shaving tool-holder is used to have very precise diameter.*

*It can be used on any cross-slides.*

*It must be completed by the customer by a roller on the top carbide pin and by a cutting insert clamped at the bottom.*

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*TURLO SRL reserves the right to modify products and information shown in this catalog at any time without prior notice*



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