



**Pasture Toppers
Models TM1200 – TM3000**

Parts Manual



Part Number: 595-0002

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Disclaimer

Although every endeavour has been made to compile as near to complete records as possible for the machine described, it is possible some information is incomplete or missing.

Giltrap Engineering request that you treat this book as a guide only, and offer any assistance necessary to procure the information or part you may require.

For parts or service enquires, please contact the applicable numbers on the previous page.

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Setup & Maintenance

Setup

- Ensure that the machine sits level or slightly tilted forward when you set it up on the tractor. When tilted forward, power requirements are less and a better finish achieved.
- If you are using the sliding top link pin, make sure that the pin is at the midway position when the mower is sitting on flat ground.
- Check the length of the driveshaft. It may be necessary to shorten the shaft as required.
- Fully extend the PTO shaft and grease the male shaft surface.
- Grease the PTO shaft universal cross bearings before initial use.
- Check the gearbox oil levels. If necessary, top up with the correct grade as listed on the next page.
- Check to make sure nuts and bolts are tight.

Maintenance

- Fully extend the PTO shaft and grease the male shaft surface approximately every 20 working hours.
- Grease the PTO shaft universal cross bearings regularly every 8 hours of use, and at the end of each working day.
- Check the gearbox oil levels every week if the machine is being used regularly, more often if there are any signs of oil leaks. If necessary, top up with HP 90 oil for 90-deg gearboxes or synthetic oil for the centre 'T' gearbox.
- Recommended oil changes are after the first 50 hours of use, and then periodically every 500 hours.
- Keep the leading edges of the flails or blades sharp - the best method is to touch them up as required with a small angle grinder. Check condition at end of working day.
- Adjust the cutting height by loosening both bolts on each skid - remove a bolt at one end and reposition the skid to the required height at this end - do the same at the other end. Repeat for the other side. Tighten all bolts.
- Check the tightness of all nuts and bolts regularly, especially the gearbox mounting bolts, the blade mounting bolts and the clamping bolts on the female splines in the drive transmissions.



Gearbox Oil

Gearbox	Code	Description	Rating	Quantity
Centre	Mobil SHC630	Synthetic Circulation & Gear Oil	ISO 220	1300ml
Outer	BP Hypergear	Extreme Pressure Gear Oil	SAE 80W-90	1120ml ea

Note: The above lubricants are supplied ex factory. Other brands may be substituted if the quality, type and viscosity are comparable.

Slip Clutch Adjustment & Maintenance

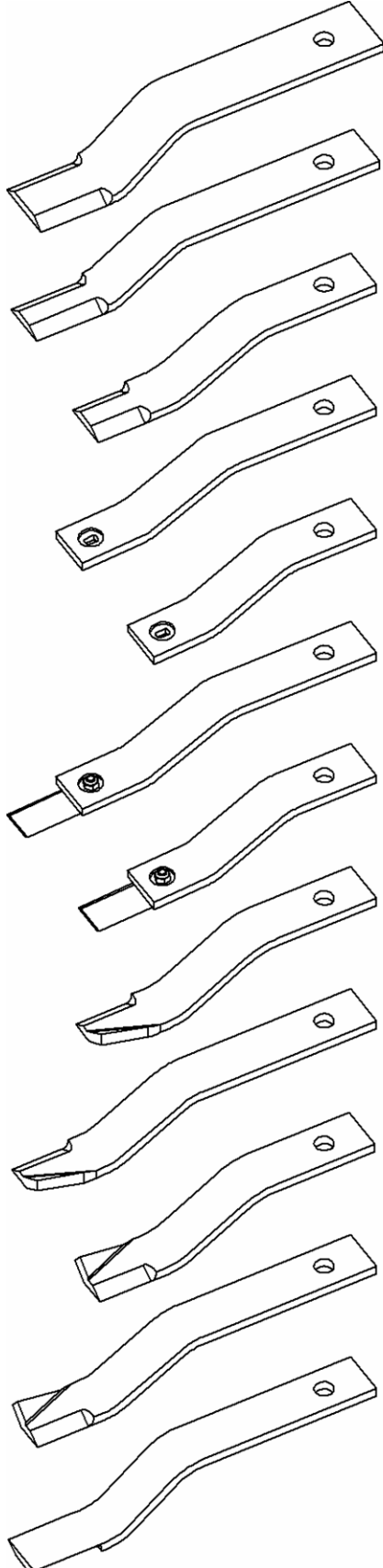
(All models of Bare-Co Clutches)

- Compress springs fully then back off 2 turns. (This is the rated torque of the clutch.)
- Fine tune so clutch slips occasionally.
- Release every 6 months and allow clutch to slip and polish faces.

Driveshaft Size & Type

Machine	Overall Length	Size	End Type
TM1200	1100mm	A4	Quick Release
TM1500	1300mm	A6	Quick Release
TM2300	1300mm	A6	Quick Release
TM2700	1300mm	A6	Quick Release
TM3000	1300mm	A6	Quick Release

Blade Options



Part # 700-0114
Heavy Duty, Top Bevel, Reversible

Part # 700-0105
Normal Duty, Top Bevel, Reversible

Part # 700-0108
1800 Normal Duty, Top Bevel,
Reversible

Part # 700-0119
STD Finecut Bar only

Part # 700-0118-1
1800 Finecut Bar only

Part # 700-0120 (RH)
Part # 700-0121 (LH)
STD Finecut Blade Assembly

Part # 700-0118 (RH)
Part # 700-0123 (LH)
1800 Finecut Blade Assembly

Part # 700-0117-1
1800 Extra Lift, Clockwise rotation

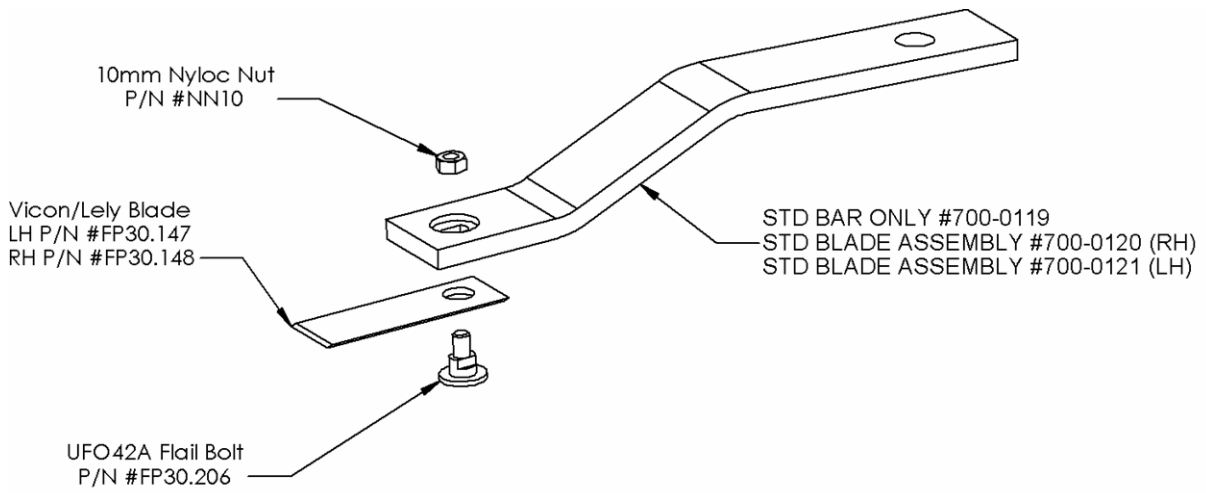
Part # 700-0117
Extra Lift, Clockwise rotation

Part # 700-0116-1
1800 Extra Lift, Anti-clockwise
rotation

Part # 700-0116
Extra Lift, Anti-clockwise rotation

Part # 700-0112
Bottom Bevel, Reversible

Fine Cut Blade Options





Transfers & Labels

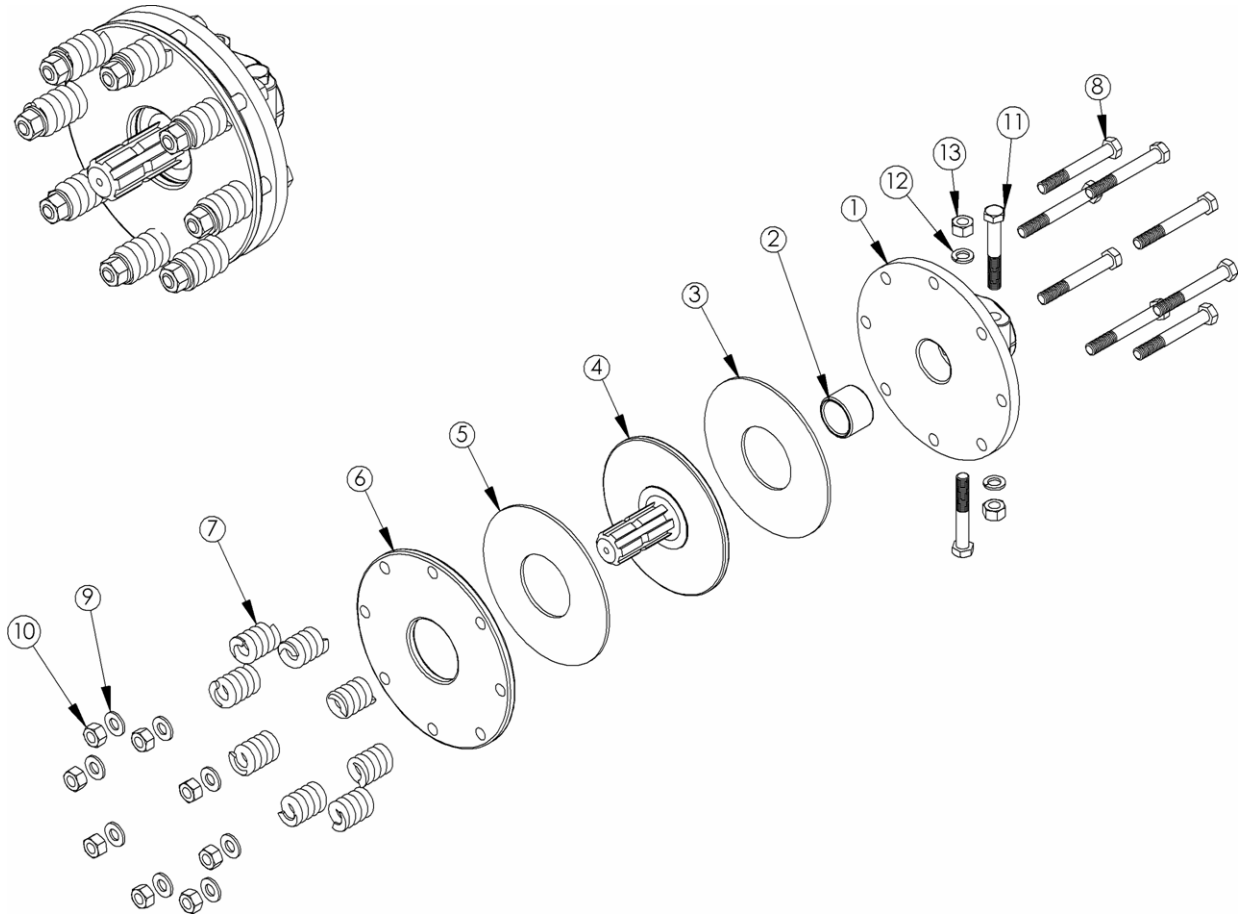
Single Gearbox Models

Item	Part Number	Description	Quantity
1	995-1226	Label – Keep clear of shaft	1
2	995-1227	Label – This area is dangerous...	2
3	995-1224	Label – Tractor PTO should be...	1
4	995-1229	Label – Do not operate without...	1
5	995-2567	Transfer, Silver – Giltrap TM1200	1
5	995-2569	Transfer, Silver – Giltrap TM1500	1
5	995-2571	Transfer, Silver – Giltrap TM1500 HS	1
6	995-1820	Identity tag	1

Twin Gearbox Models

Item	Part Number	Description	Quantity
1	995-1226	Label – Keep clear of shaft	1
2	995-1227	Label – This area is dangerous...	2
3	995-1224	Label – Tractor PTO should be...	1
4	995-1229	Label – Do not operate without...	1
5	995-2567	Transfer, Silver – Giltrap TM2300	1
5	995-2569	Transfer, Silver – Giltrap TM2700	1
5	995-2571	Transfer, Silver – Giltrap TM3000	1
6	995-1820	Identity tag	1

Slip Clutch Assembly





Slip Clutch Assembly

Item	Part Number	Description	Qty
-	PTO-B3605	Bare-Co 60HP Clutch Assembly Complete	-
1	PTO-B3720	1 3/8" x 6 Spline Base Assembly	1
2	PTO-B4172	Bush 1 1/8" I.D	1
3	PTO-B3721	Friction Disc 6 1/2" O.D x 2 1/2" I.D	1
4	PTO-B3722	1-3/8" Spline Drive Plate 6 1/2" O.D - 1 1/2" Spigot	1
5	PTO-B3721	Friction Disc 6 1/2" O.D x 2 1/2" I.D	1
6	PTO-B4155	Outer Pressure Plate	1
7	PTO-B3723	Spring, Compress	6
8	B12x90	Bolt, M12x90	6
9	WA12	Washer 12x28x3 Galv	6
10	NN12	Nut, Nyloc M12	6
11	B12x80	Bolt, M12x80	2
12	WASG12	Washer, Spring M12	2
13	N12	Nut, M12	2

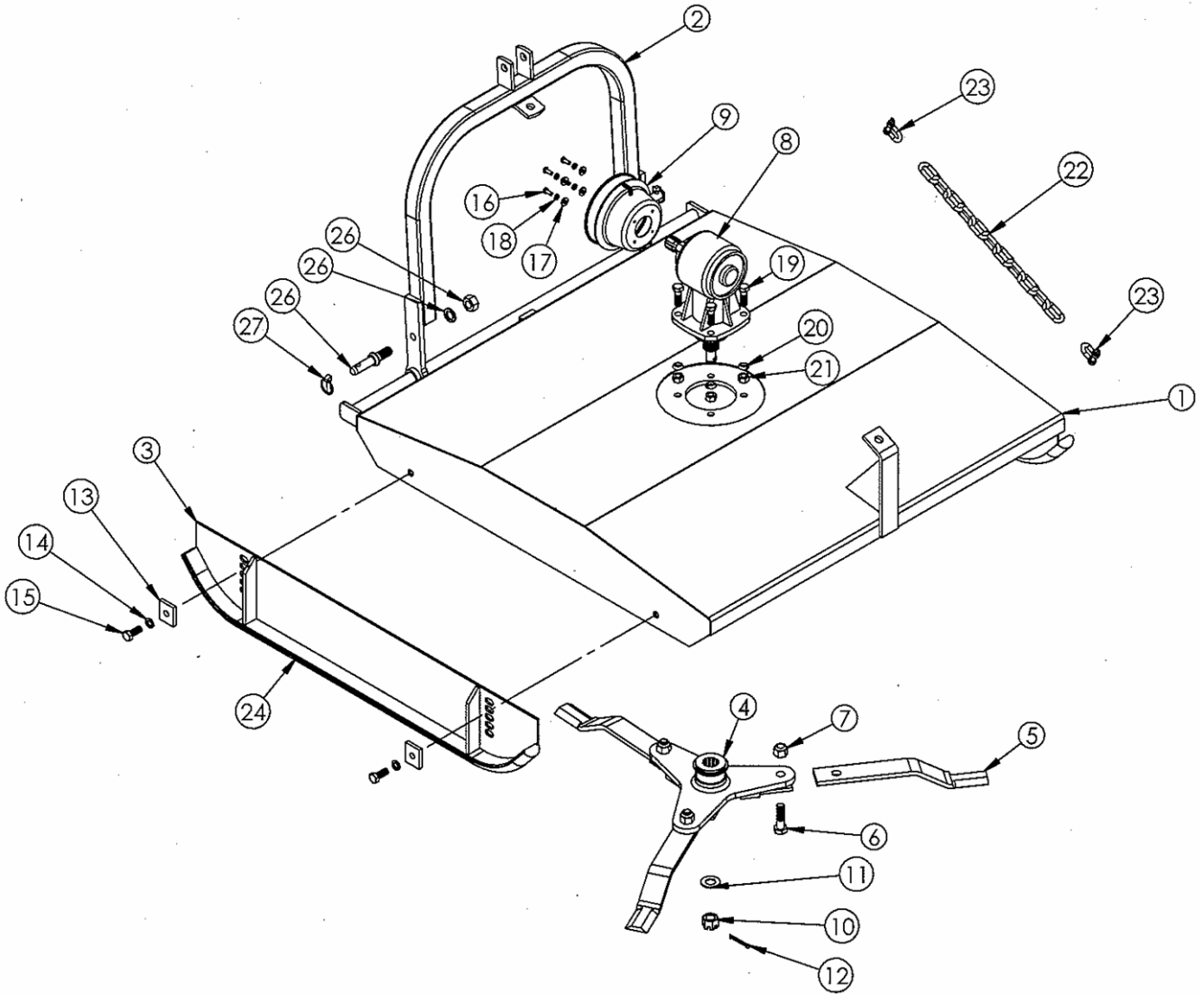
Slip Clutch Adjustment & Maintenance (All models of Bare-Co Clutches)

Compress springs fully then back off 2 turns. (This is the rated torque of the clutch.)

Fine tune so clutch slips occasionally.

Release every 6 months and allow clutch to slip and polish faces.

TM1200 Topper Assembly

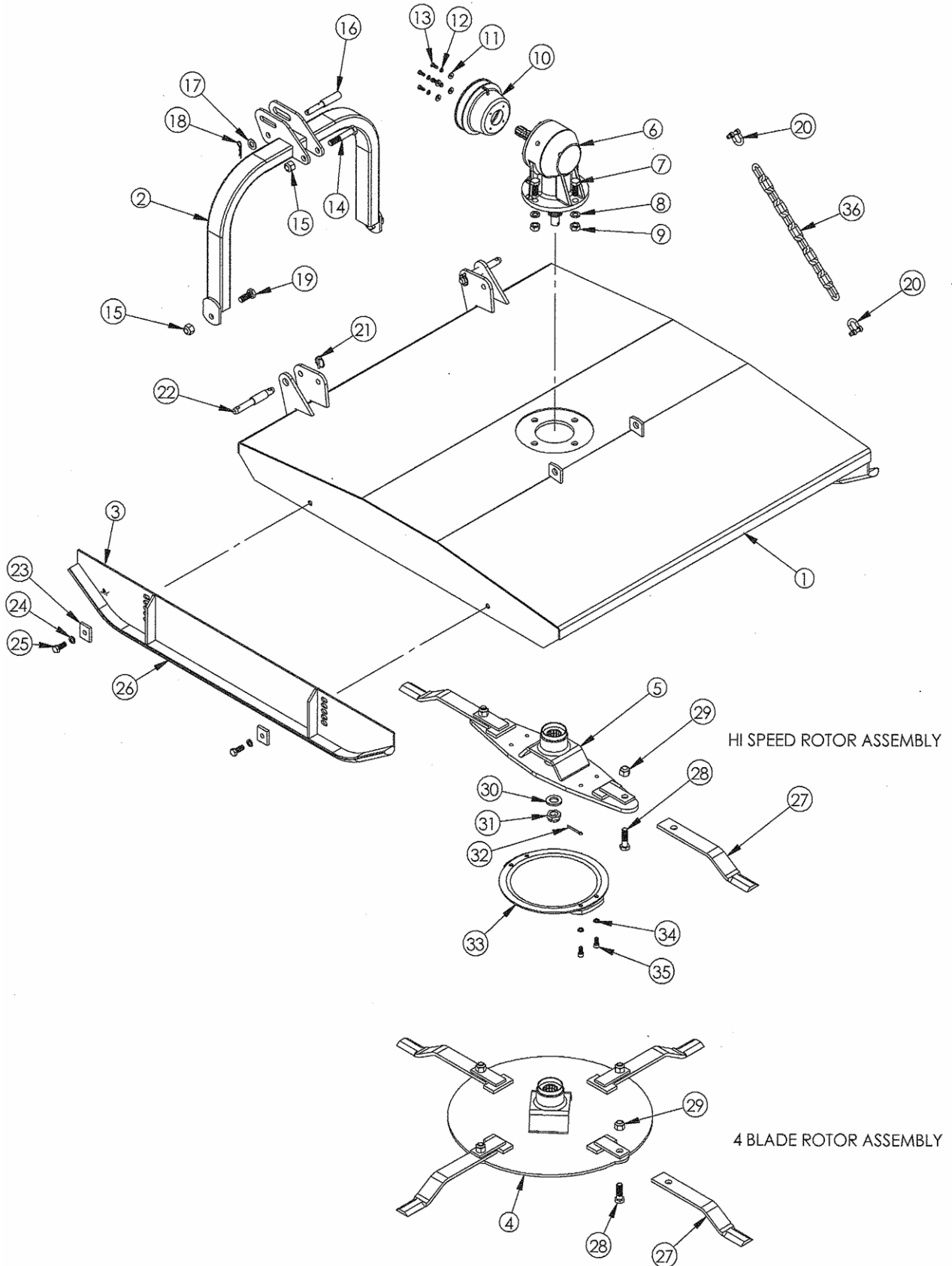




TM1200 Topper Assembly

Item No.	Giltrap Part #	Description	Qty
1	-	TM1200 Body	1
2	-	Headstock	1
3	700-0518	Skid - TM1200/2300	2
4	700-0154	Rotor	1
5	700-0105	Blade (see page 6 for blade selection)	3
6	BF7/8x3	Bolt	3
7	NNF7/8	Nut - Nyloc	3
8	-	Gearbox 1.93:1 (see page 39 for details)	1
9	PTO-CONESM	PTO Cone	1
10	-	Castle Nut (see page 39 for details)	1
11	-	Washer (see page 39 for details)	1
12	-	Split Pin (see page 39 for details)	1
13	700-0609	Square Washer	4
14	WASG16	Spring Washer	4
15	B16x45	Bolt	4
16	B8x20	Bolt	4
17	WA8	Washer	4
18	WASG8	Spring Washer	4
19	B16x55	Bolt	4
20	S51239	Conical Washer	4
21	NN16	Nut - Nyloc	4
22	CH10GOLD	Chain	-
23	DSH125ZPT	D Shackle - 12.5mm Tested	2
24	700-0630	Wearshoe - Hardened (Welded On)	4
25	FP10.082	Shaft Lock Pin - 8mm	2
26	FP10.513	Threaded Pin - Cat 1	2
27	FP10.013	Lynch Pin - 11mm	2

TM1500 Topper Assembly

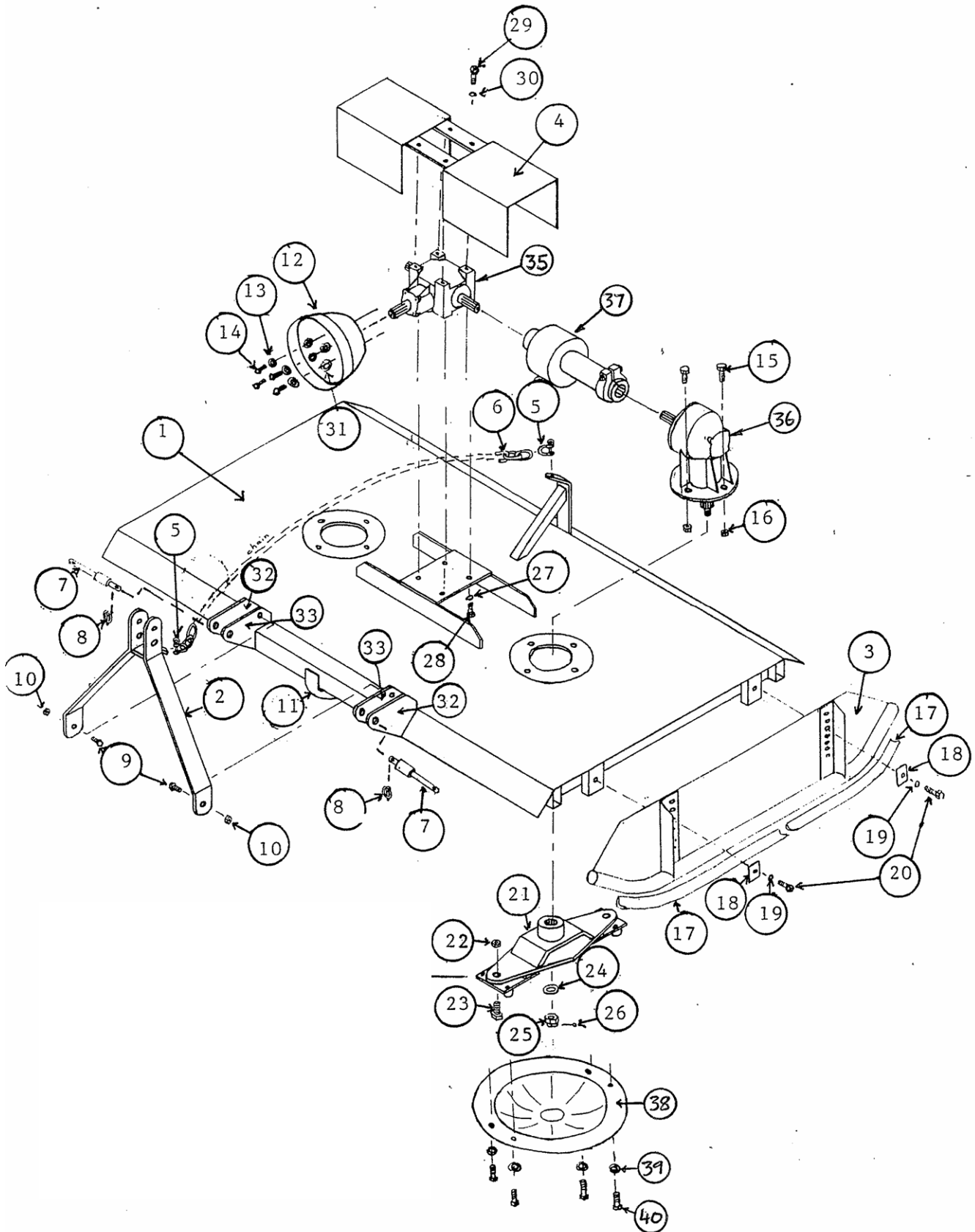




TM1500 Topper Assembly

Item	Part Number	Description	Quantity Used	
			Lo Spd	Hi Spd
1	-	Topper Body	1	1
2	700-0320	Headstock	1	1
3	700-0532	Skid TM1500/3000	2	2
4	700-0168	Blade Holder - 4 Blade	1	
5	700-0161	Blade Holder - 2 Blade		1
6	-	Gearbox 1.49:1 (see pages 41 & 43 for details)	1	
6	-	Gearbox 1.93:1 (see pages 40 & 42 for details)		1
7	B20x55	Bolt	4	4
8	S51245	Conical Washer 20mm	4	4
9	NN20	Nut - Nyloc	4	4
10	PTO-CONESM	PTO Cone	1	1
11	WA8	Flat Washer	4	4
12	WASG8	Spring Washer	4	4
13	B8x16	Bolt	4	4
14	B20x100	Bolt	1	1
15	NN20	Nut - Nyloc	1	1
16	FP10.377	Linkage Pin	1	1
17	WA20	Flat Washer	1	1
18	FP10.103	R Clip	1	1
19	B20x50	Bolt	2	2
20	DSH12.5ZPT	D Shackle - 12.5mm Tested	3	3
21	FP10.013	Lynch Pin - 11mm	2	2
22	700-0364	Linkage Pin - Cat 1 & 2	2	2
23	700-0609	Square Washer	4	4
24	WASG16	Spring Washer	4	4
25	B16x45	Bolt	4	4
26	700-0630	Wearshoe - Hardened (Welded On)	4	4
27	700-0105	Blade (see page 6 for blade selection)	4	2
28	BF7/8x3	Bolt	4	2
29	NNF7/8	Nut - Nyloc	4	2
30	-	Washer (see pages 40-43 for details)	1	1
31	-	Castle Nut (see pages 40-43 for details)	1	1
32	-	Split Pin (see pages 40-43 for details)	1	1
33	700-0028	Anti-Scalp Saucer	1	1
34	WASG12	Spring Washer	4	4
35	SC12x25SC	Cap Screw	4	4
36	CH10GOLD	Chain 10mm	-	-

TM2300 Topper Assembly (Flat Body Style)

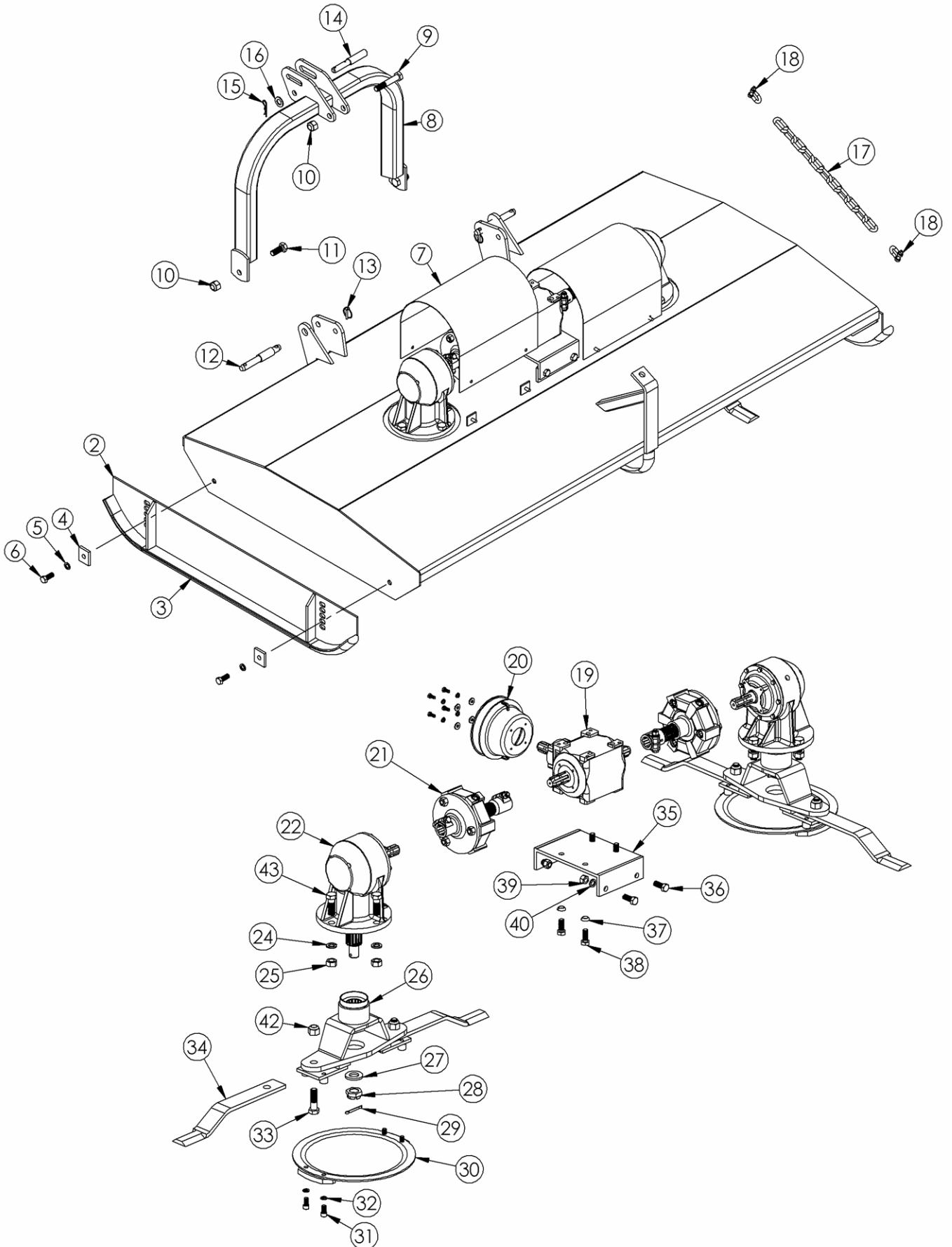




TM2300 Topper Assembly (Flat Body Style)

Item No.	Giltrap Part #	Description	Qty
1	-	TM2300 Body	1
2	700-0329	Headstock	1
3	700-0518	Skid TM1200/2300	2
4	700-0252	Gearbox Cover	1
5	FP54.255	D Shackle - 12.5mm Tested	2
6	CH10GOLD	Chain	1.3m
7	700-0364	Linkage Pin - Cat 1 & 2	2
8	FP10.013	Lynch Pin - 11mm	2
9	B20x50	Bolt	2
10	NN20	Nut - Nyloc	2
11	700-0504	Centre Skid	2
12	PTO-000.517	Linkage Pin - Cat 1 & 2	1
13	WASG8	Spring Washer	4
14	B8x20	Bolt	4
15	B20x55	Bolt	4
16	NN20	Nut - Nyloc	4
17	700-0630	Wearshoe - Hardened (Welded On)	4
18	700-0609	Square Washer	4
19	WASG16	Spring Washer	4
20	B16x45	Bolt	4
21	700-0175	Blade Holder	2
22	NNF7/8	Nut - Nyloc	4
23	BF7/8x3	Bolt	4
24	-	Washer - 31x56x4 (see pages 40-43 for details)	2
25	-	Castle Nut - M30x2 (see pages 40-43 for details)	2
26	SP6x60	Split Pin - (see pages 40-43 for details)	2
27	WASG16	Spring Washer	4
28	B16x40	Bolt	4
29	B10x25	Bolt	4
30	WASG10	Spring Washer	4
31	WA8	Flat Washer	4
32	700-0340	Linkage Plate - 1 Hole	2
33	700-0341	Linkage Plate - 2 Hole	2
34	700-0257	Gearbox Plate	2
35	-	T Gearbox (see pages 47-49 for details)	1
36	-	Gearbox 1:1.93 (see pages 40 & 42 for details)	2
37	-	Coupling (see pages 26-32 for details)	2
38	700-0028	Anti-scalp Saucer	2
39	WASG12	Spring Washer	4
40	B12x30	Bolt	4

TM2300 Topper Assembly

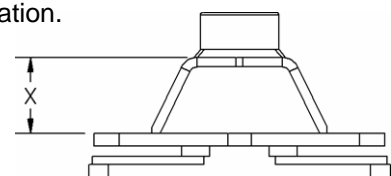


TM2300 Topper Assembly

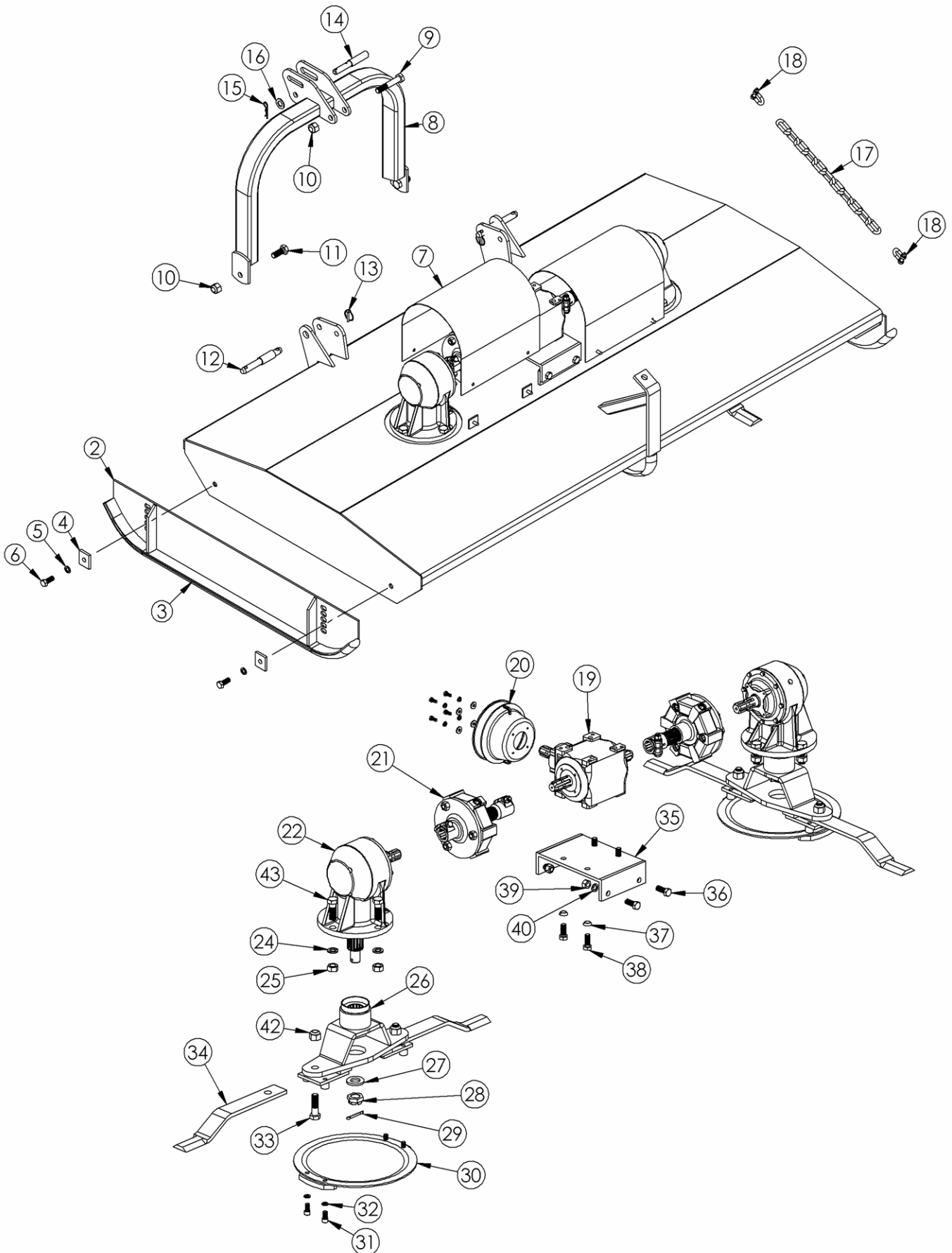
Item No.	Giltrap Part #	Description	Qty
1	-	TM2300 Body	1
2	700-0518	Skid TM1200/2300	2
3	700-0630	Wear shoe - Hardened (Welded On)	4
4	700-0609	Square Washer	4
5	WASG16	Spring Washer	4
6	B16x45	Bolt	4
7	700-0266/23	Gearbox Cover	2
8	700-0320	Headstock	1
9	B20x100	Bolt	1
10	NN20	Nut - Nyloc	3
11	B20x50	Bolt	2
12	700-0364	Linkage Pin - Cat 1 & 2	2
13	FP10.013	Lynch Pin - 11mm	2
14	FP10.377	Linkage Pin	1
15	FP10.103	R Clip	1
16	WA20	Flat Washer	1
17	CH10GOLD	Chain	-
18	FP54.255	D Shackle - 12.5mm Tested	2
19	-	T Gearbox (see pages 47-49 for details)	1
20	PTO-BC/A40	Shaft Cover	1
21	-	Coupling (see pages 29-32 for details)	2
22	-	Gearbox 1.93:1 (see pages 52-57 for details)	2
24	S51245	Conical Washer	8
25	NN20	Nylock Nut	8
26	700-0175-1	Blade Rotor	2
27	-	Flat Washer (see pages 40-43 for details)	2
28	-	Castle Nut (see pages 40-43 for details)	2
29	-	Split Pin (see pages 40-43 for details)	2
30	700-0028	Anti-scalp Saucer	2
31	SC12x25SC	Cap Screw	8
32	WASG12	Spring Washer	8
33	BF7/8x3	Bolt	4
34	700-0105	Blade (see page 6 for details)	4
35	700-0255	Centre Gearbox Mount Plate - Comer	1
35	700-0255-1	Centre Gearbox Mount Plate - Bondioli	1
36	B16x45	Bolt	4
37	S51239	Conical Washer	4
38	B16x35	Bolt	4
39	N16	Nut	4
40	WASG16	Spring Washer	4
42	NNF7/8	Nylock Nut	4
43	B20x55	Bolt	8

Note: Slip clutch assembly not shown.

Note: When ordering a blade rotor, supply the dimension as per the illustration.



TM2700 Topper Assembly

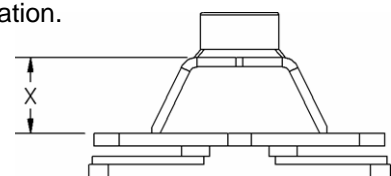


TM2700 Topper Assembly

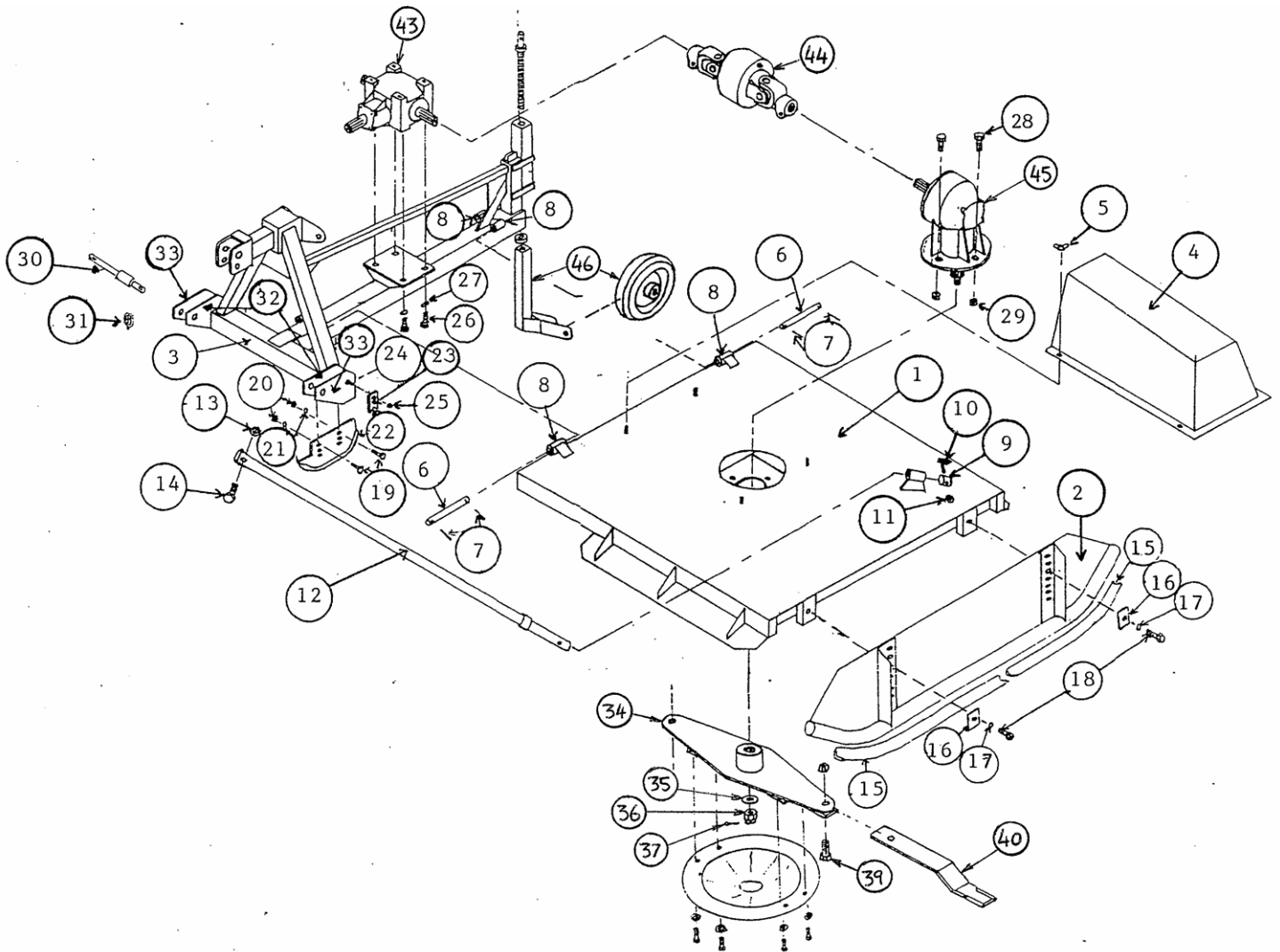
Item No.	Giltrap Part #	Description	Qty
1	-	TM2700 Body	1
2	700-0530	Skid TM2700	2
3	700-0630	Wear shoe - Hardened (Welded On)	4
4	700-0609	Square Washer	4
5	WASG16	Spring Washer	4
6	B16x45	Bolt	4
7	700-0266/27	Gearbox Cover	2
8	700-0320	Headstock	1
9	B20x100	Bolt	1
10	NN20	Nut - Nyloc	3
11	B20x50	Bolt	2
12	700-0364	Linkage Pin - Cat 1 & 2	2
13	FP10.013	Lynch Pin - 11mm	2
14	FP10.377	Linkage Pin	1
15	FP10.103	R Clip	1
16	WA20	Flat Washer	1
17	CH10GOLD	Chain	-
18	FP54.255	D Shackle - 12.5mm Tested	2
19	-	T Gearbox (see pages 47-49 for details)	1
20	PTO-BC/A40	Shaft Cover	1
21	-	Coupling (see pages 34 for details)	2
22	-	Gearbox 1.46:1 (see pages 52-57 for details)	2
24	S51245	Conical Washer	8
25	NN20	Nylock Nut	8
26	700-0178	Blade Rotor	2
27	-	Flat Washer (see pages 40-43 for details)	2
28	-	Castle Nut (see pages 40-43 for details)	2
29	-	Split Pin (see pages 40-43 for details)	2
30	700-0028	Anti-scalp Saucer	2
31	SC12x25SC	Cap Screw	8
32	WASG12	Spring Washer	8
33	BF7/8x3	Bolt	4
34	700-0105	Blade (see page 6 for details)	4
35	700-0255	Centre Gearbox Mount Plate - Comer	1
35	700-0255-1	Centre Gearbox Mount Plate - Bondioli	1
35	700-0255-2	Centre Gearbox Mount Plate - Rotis	1
36	B16x45	Bolt	4
37	S51239	Conical Washer	4
38	B16x35	Bolt	4
39	N16	Nut	4
40	WASG16	Spring Washer	4
42	NNF7/8	Nylock Nut	4
43	B20x55	Bolt	8

Note: Slip clutch assembly not shown.

Note: When ordering a blade rotor, supply the dimension as per the illustration.



TM3000 Body Assembly (Pivot Type)

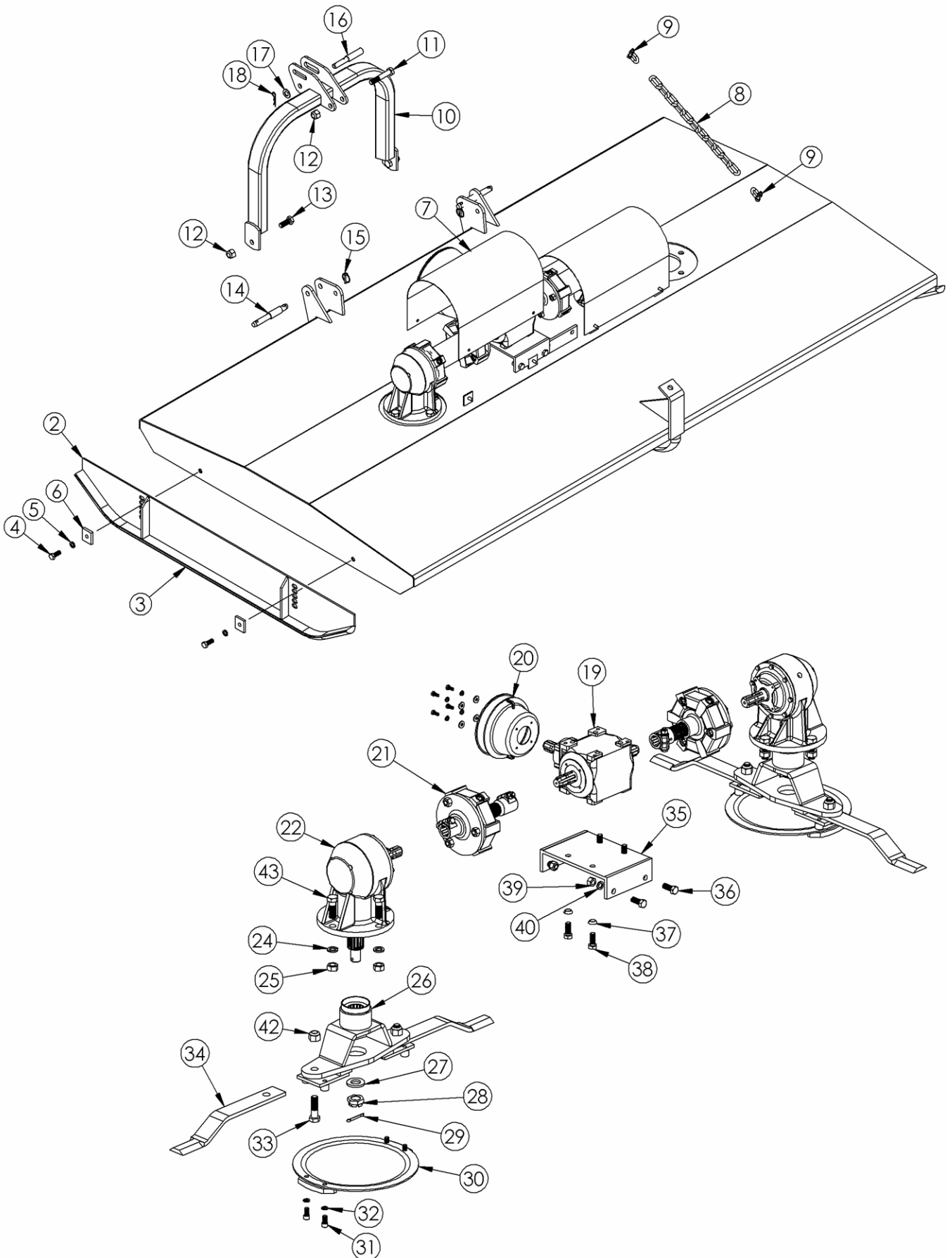




TM3000 Body Assembly (Pivot Type)

Item No.	Giltrap Part #	Description	Qty
1	700-0210	Body TM3000	2
2	700-0532	Skid TM1500/3000	2
3	700-0336	Linkage 'A' Frame	1
4	700-0259	Gearbox Cover	2
5	NWG10	Wingnut 10mm	8
6	700-0308	Hinge Pin	2
7	RP6x40	Roll Pin	4
8	700-0301	Hinge	4
9	700-0371	Pipe Stop	2
10	B12x55	Bolt	2
11	NN12	Nut - Nyloc	2
12	700-0042	Arm	2
13	NN16	Nut - Nyloc	2
14	B16x50	Bolt	2
15	700-0630	Wearshoe - Hardened	4
16	700-0609	Square Washer	4
17	WASG16	Spring Washer	4
18	B16x45	Bolt	4
19	B16x40	Bolt	4
20	NN16	Nut - Nyloc	4
21	WA16	Washer	4
22	700-0511	Skid - Centre Adjustable	1
23	700-0588	Stop - Early Model	2
24	B12x30	Bolt	2
25	NN12	Nut - Nyloc	2
26	B16x40	Bolt	4
27	WASG16	Spring Washer	4
28	B20x55	Bolt	4
29	NN20	Nut - Nyloc	4
30	700-0364	Pin - Linkage Cat 1 and 2	2
31	FP10.013	Lynch Pin - 11mm	2
32	700-0344	Linkage Plate - 7/8" Hole	2
33	700-0343	Linkage Plate - 29mm Hole	2
34	700-0182	Blade Holder	2
35	-	Flat Washer (see pages 40-43 for details)	2
36	-	Castle Nut (see pages 40-43 for details)	2
37	-	Split Pin (see pages 40-43 for details)	2
38	NNF7/8	Nut - Nyloc	4
39	BF7/8x3	Bolt	4
40	700-0105	Blade (see page 6 for blade selection)	4
41	WASG12	Spring Washer	8
42	B12x30	Bolt	8
43	-	T Gearbox (see pages 47-49 for details)	1
44	-	Drive Coupling (see pages 33 - 35 for details)	2
45	-	Gearbox 1 : 1.46 (see pages 41 & 43 for details)	2
46	301-7000	Wheel Jack (see page 24 for details)	1

TM3000 Body Assembly



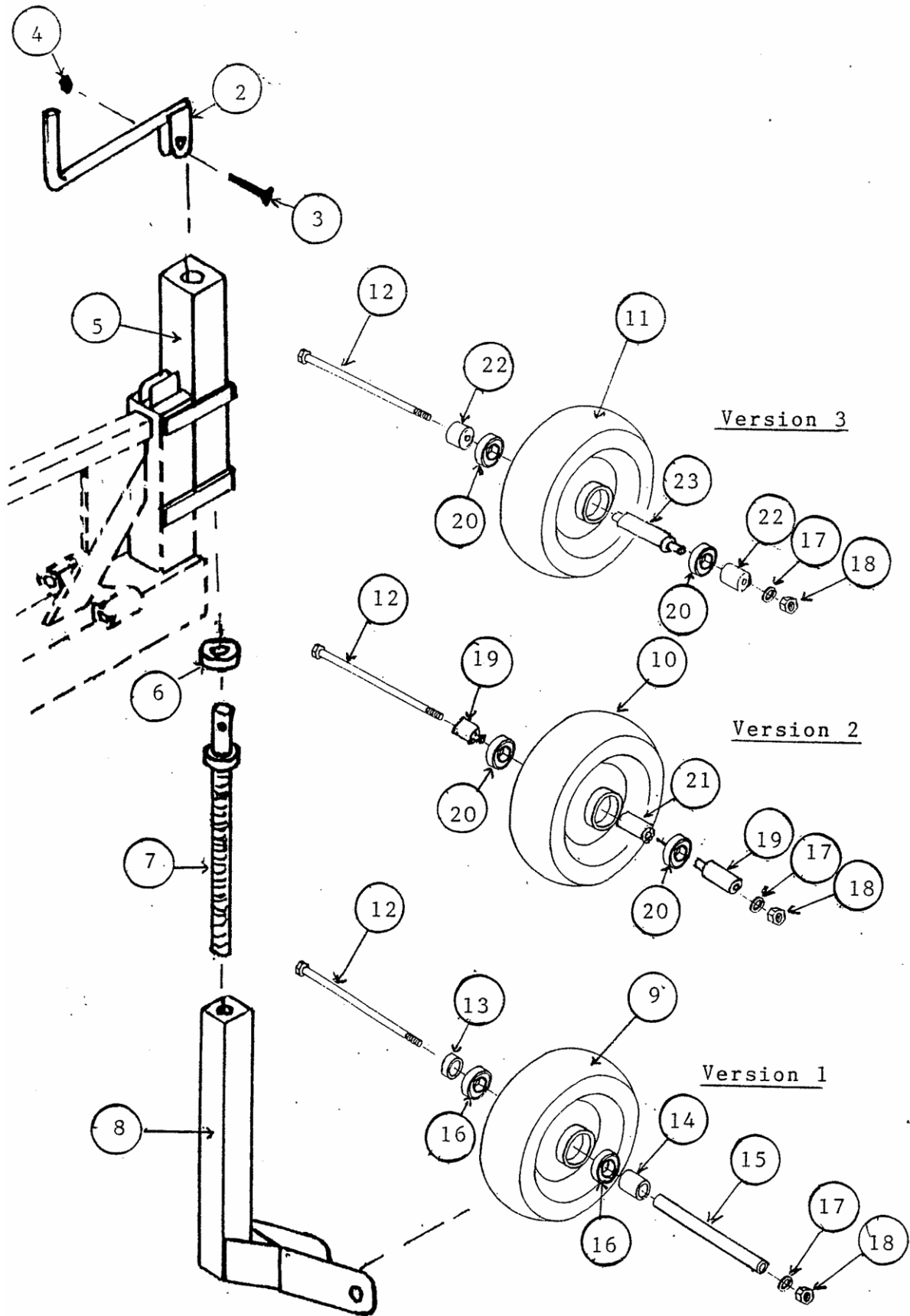


TM3000 Body Assembly

Item No.	Giltrap Part #	Description	Qty
1	-	TM3000 Body	1
2	700-0532	Skid TM1500/3000	2
3	700-0630	Wearshoe - Hardened (Welded On)	4
4	B16x45	Bolt	4
5	WASG16	Spring Washer	4
6	700-0609	Square Washer	4
7	700-0266/27	Gearbox Cover	2
8	CH10GOLD	Chain	-
9	FP54.255	D Shackle - 12.5mm Tested	2
10	700-0320	Headstock	1
11	B20x100	Bolt	1
12	NN20	Nut - Nyloc	3
13	B20x50	Bolt	2
14	700-0364	Linkage Pin - Cat 1 & 2	2
15	FP10.013	Lynch Pin - 11mm	2
16	FP10.377	Linkage Pin	1
17	WA20	Flat Washer	1
18	FP10.103	R Clip	1
19	-	T Gearbox (see pages 47-49 for details)	1
20	PTO-BC/A40	Shaft Cover	1
21	-	Coupling (see pages 37 & 38 for details)	2
22	-	Gearbox 1.46:1 (see pages 41 & 43 for details)	2
24	S51245	Conical Washer	8
25	NN20	Nylock Nut	8
26	700-0161	Blade Rotor	2
27	-	Flat Washer (see pages 40-43 for details)	2
28	-	Castle Nut (see pages 40-43 for details)	2
29	-	Split Pin (see pages 40-43 for details)	2
30	700-0028	Anti-scalp Saucer	2
31	SC12x25SC	Cap Screw	8
32	WASG12	Spring Washer	8
33	BF7/8x3	Bolt	4
34	700-0105	Blade (see page 6 for blade selection)	4
35	700-0255	Centre Gearbox Mount Plate - Comer	1
35	700-0255-1	Centre Gearbox Mount Plate - Bondioli	1
36	B16x45	Bolt	4
37	S51239	Conical Washer	4
38	B16x35	Bolt	4
39	N16	Nut	4
40	WASG16	Spring Washer	4
42	NNF7/8	Nylock Nut	4
43	B20x55	Bolt	8

Note: Slip clutch assembly not shown.

Wheel Jack – TM3000



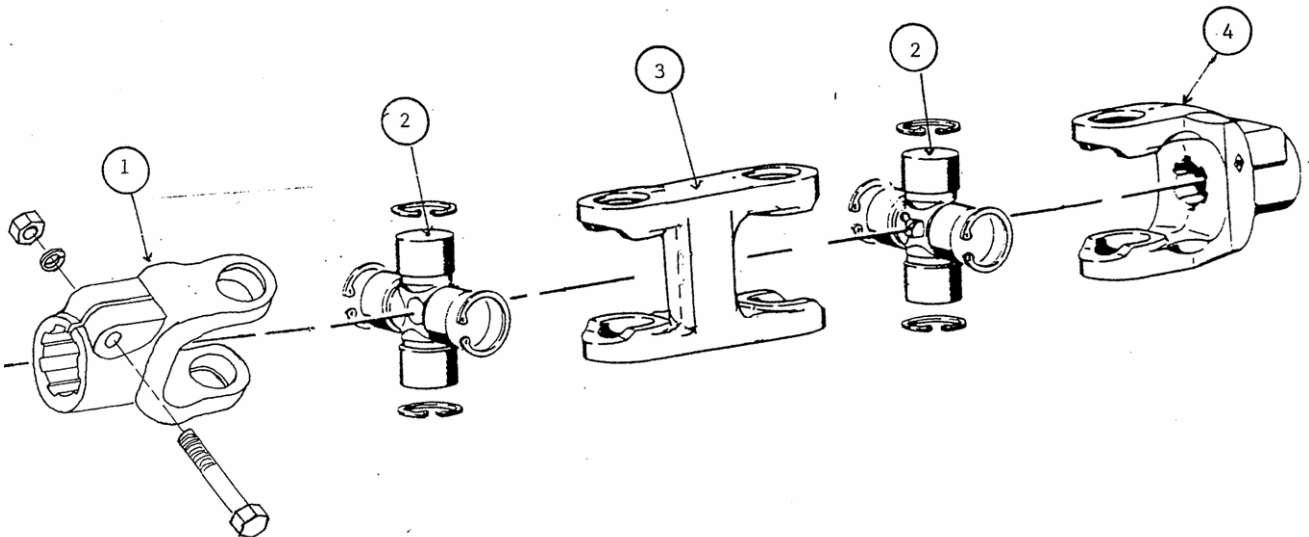


Wheel Jack – TM3000

Item	Giltrap Part #	Description	Quantity
1	301-7000	Jack TM3000 Complete	1
2	301-7016	Jack TM3000 Handle	1
3	B6x45	Bolt, M6x45	1
4	NN6	Nut, Nyloc M6	1
5	301-7023	Housing	1
6	290-1000	Thrust Bearing, BRGT2616 (3/4")	1
6	290-1021	Thrust Bearing, BRGT51205 (1")	1
7	301-2066	Jack Model 2 Thread Assembly	1
8	301-7030	Leg -Wheel Brace	1
9	301-7086	Wheel - Steel (Early Model)	1
10	301-7093	Wheel - Rubber	1
11	301-7100	Wheel - Steel from Dec 1992	1
12	B20x180	Bolt, M20x180	1
13	301-7044	Spacer (Early Model)	1
14	301-7051	Spacer (Early Model)	1
15	301-7009	Axle	1
16	BRG6206-2RS1	Bearing, 6206	2
17	WASG20	Washer, Spring M20	1
18	N20	Nut, M20	1
19	301-7065	Spacer - Stepped	2
20	BRG6205-2RS1	Bearing, 6205	2
21	301-7058	Spacer - Centre	1
22	301-7079	Spacer	2
23	301-7072	Spacer - Centre Stepped	1

Note: To modify for using bearing 51205, turn handle 90 degrees and redrill hole on thread assembly.

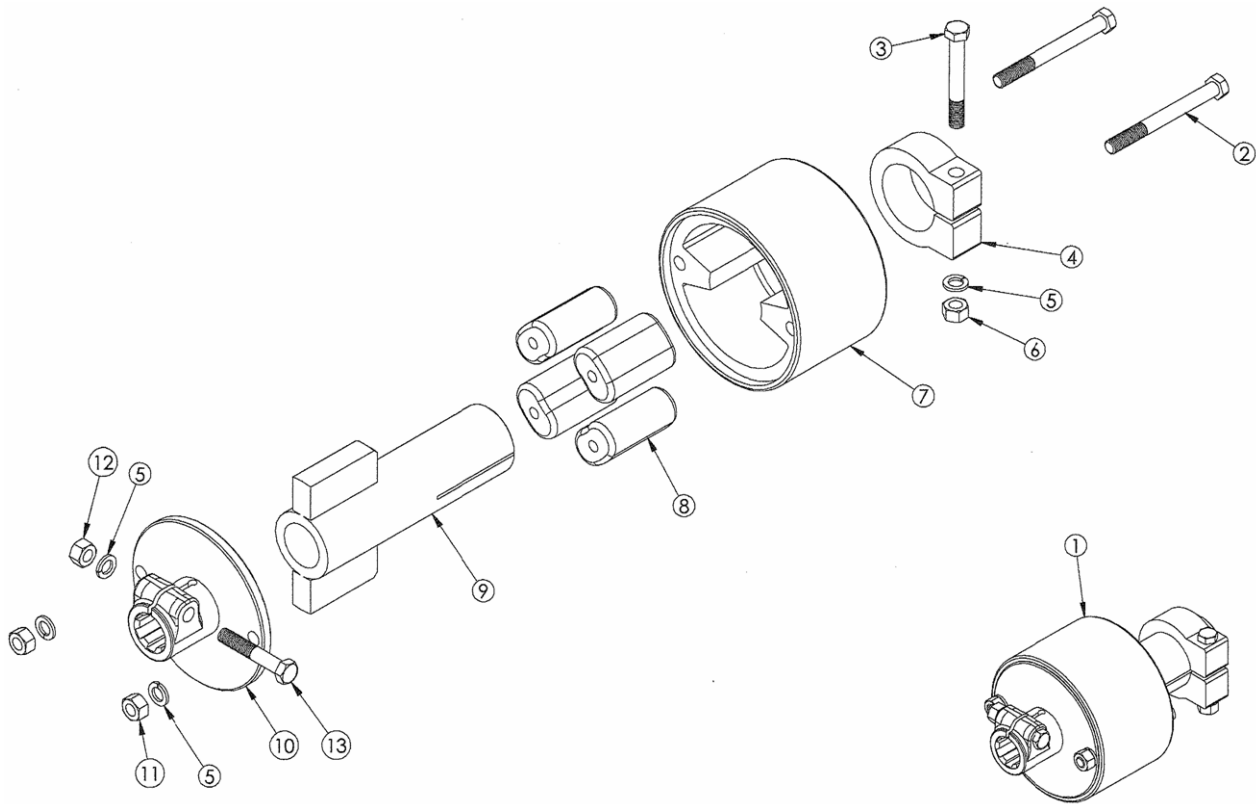
TM2300 Side Drive Coupling V1



Item No.	Giltrap Part #	Description	Qty
-	700-0448	Side Drive TM2300 V1 – Complete Assembly	2
1	PTO35.10.04	Yoke	2
2	PTO35.00.00	U Joint (32 x 76)	1
3	PTO35.28.00	H Joint Double Yoke FP 09.364 (W2400), Bare-Co A035800	1
4	700-0647	Yoke – Modified (Shortened) - 35.22.106	4

Note: Not all parts are available.

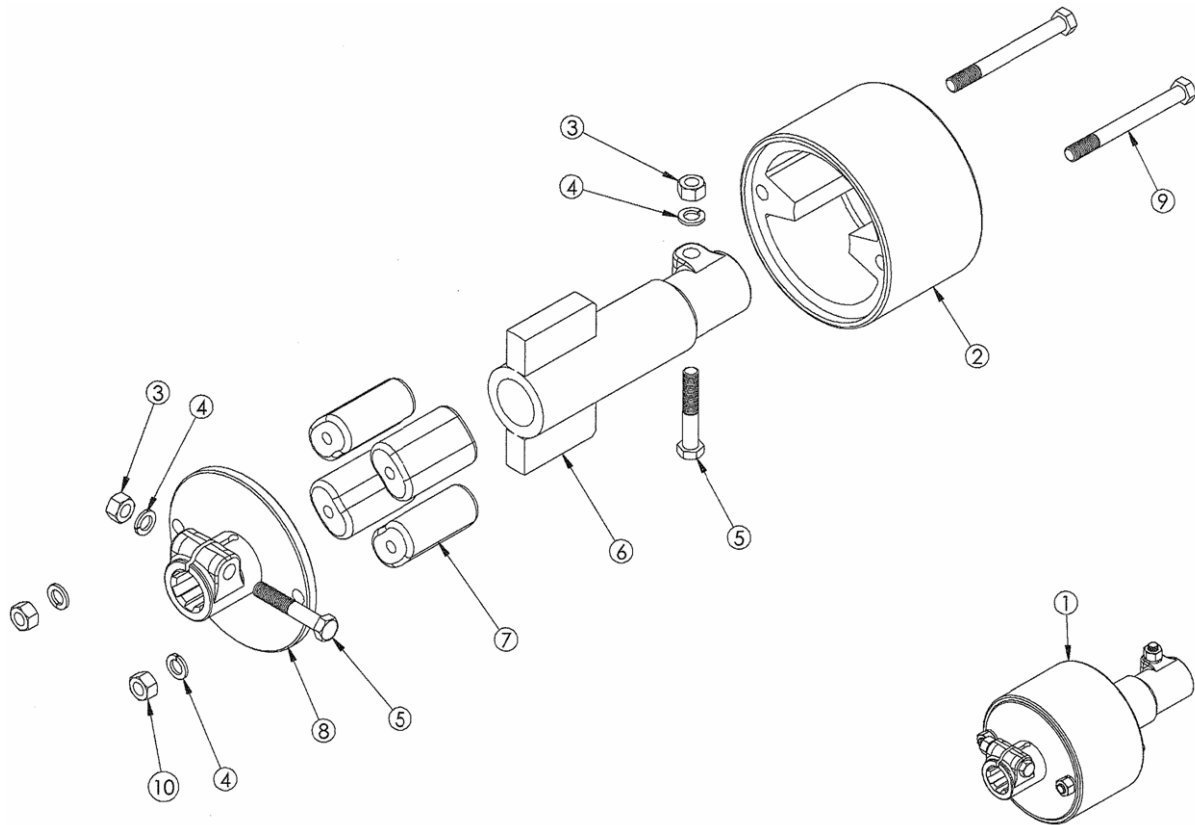
TM2300 Side Drive Coupling V2



Item No.	Giltrap Part #	Description	Qty
1	700-0455	Complete Assembly	1
2	B12x120	Bolt	2
3	BF1/2x3-1/2	Bolt	1
4	700-0224	Clamp - Side Drive Tube	1
5	WASG12	Spring Washer	4
6	NF1/2	Nut	1
7	700-0007	Aluminium Housing	1
8	700-0399	Rubber Block	4
9	700-0420	Splined Tube	1
10	700-0290	Flange Plate	1
11	N12	Nut	2
12	N12x1.25	Nut	1
13	B12x70x1.25	Bolt	1

Note: Not all parts may be available. Advisable to upgrade to the later version coupling.

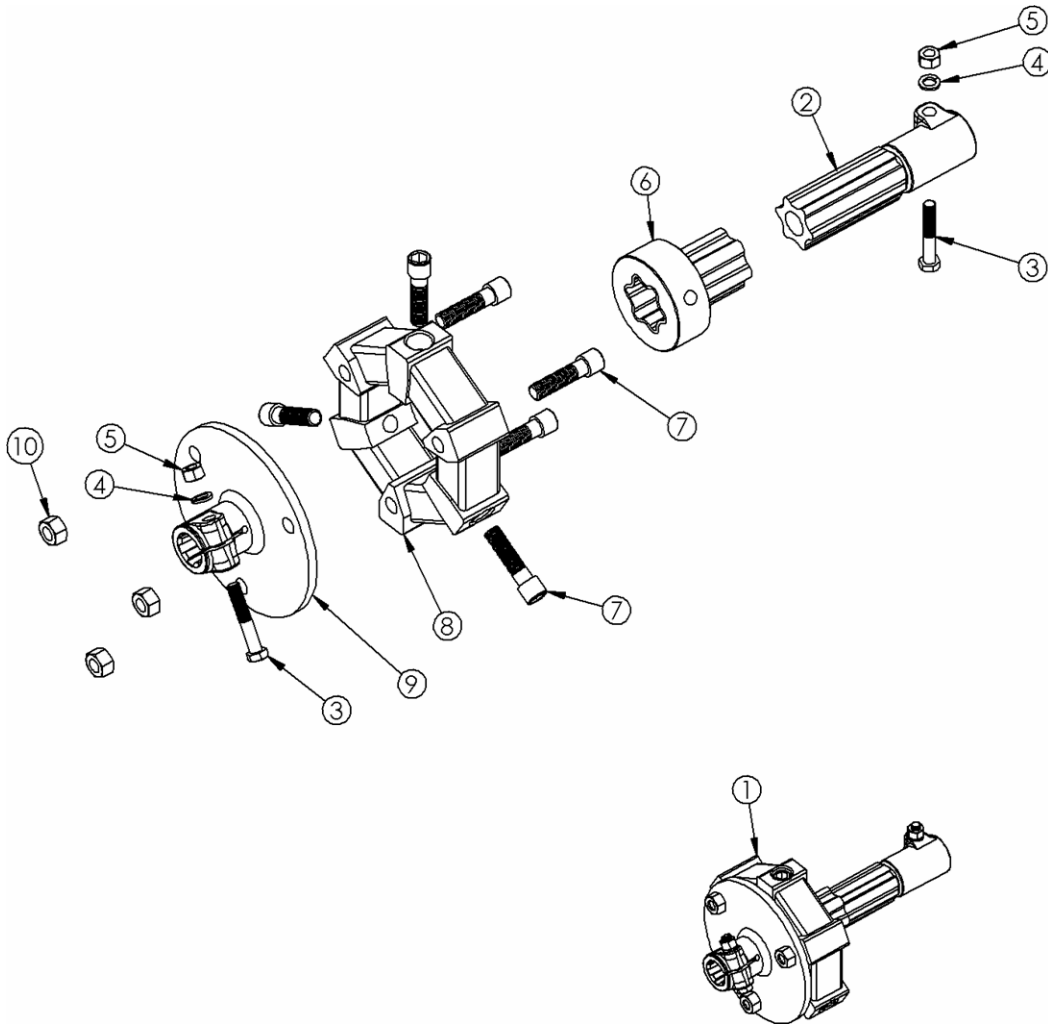
TM2300 Side Drive Coupling V3



Item No.	Giltrap Part #	Description	Qty
1	700-0458	Complete Assembly	1
2	700-0007	Aluminium Housing	1
3	N12x1.25	Nut	2
4	WASG12	Spring Washer	4
5	B12x70x1.25	Bolt	2
6	700-0420-2	Splined Tube	1
7	700-0399	Rubber Block	4
8	700-0290	Flange Plate	1
9	B12x120	Bolt	2
10	N12	Nut	2

Note: Not all parts may be available. Advisable to upgrade to the later version coupling.

TM2300 Side Drive Coupling V4



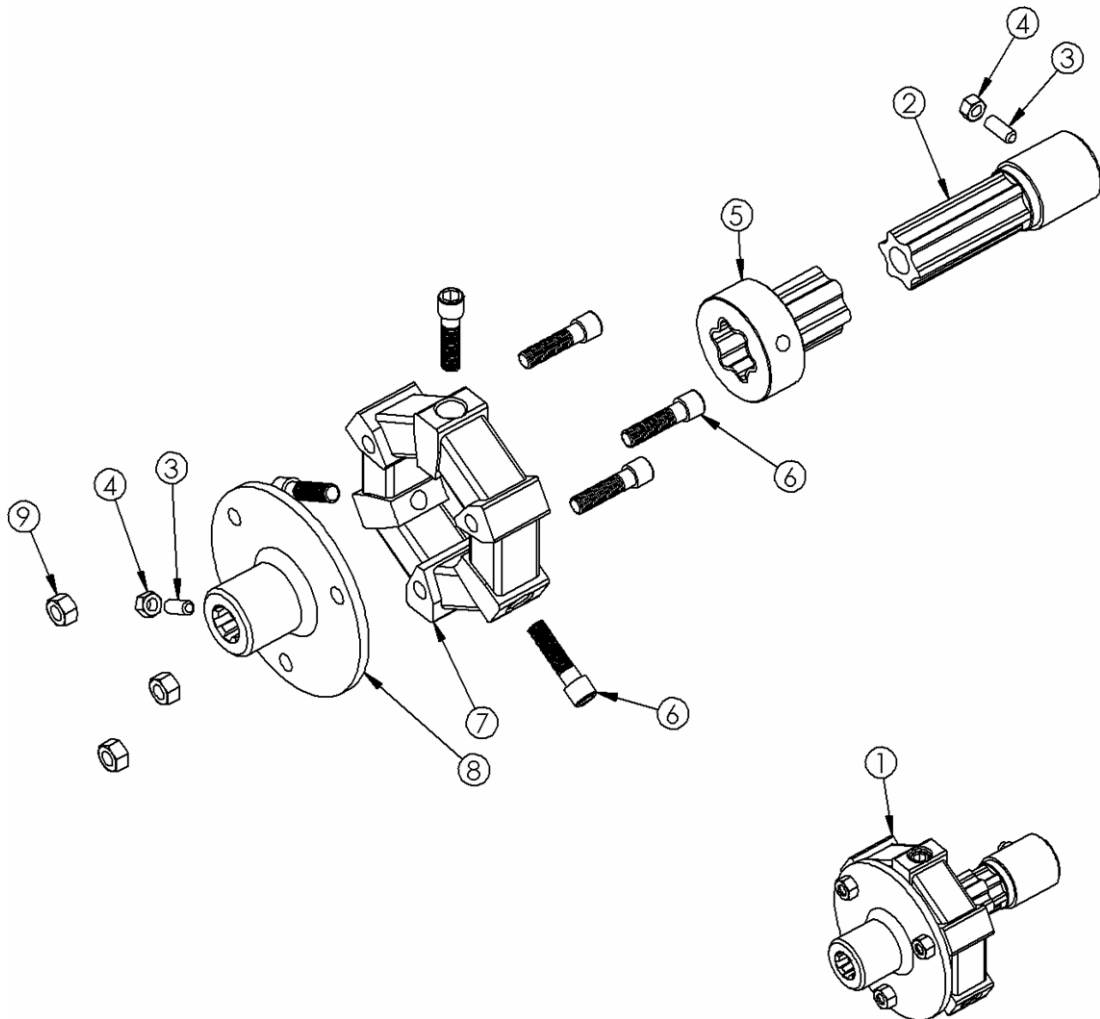
Item	Part Number	Description	Quantity Used
1	700-0488	Drive Coupling, Complete, 2300	2
2	700-0575	Male star 6 spline with pinch bolt hub	1
3	B12x70x1.25	Bolt, M12x70x1.25	2
4	WASG12	Washer, Spring M12	2
5	N12x1.25	Nut, M12x1.25	2
6	700-0568	Female star 6 spline with hub	1
7	SC16x65SC	Cap Screw, Allen Head M16x65	6
8	700-0231	Centaflex, Size 30	1
9	700-0580	Flange Plate (V1)	1
10	NN16	Nut, Nyloc M16	3

Note: All versions of flange (#9) are able to interchange.

Note: V4 gearbox coupling was used from approx August 2005 onwards.

Note: Not all parts may be available. Advisable to upgrade to the later version coupling.

TM2300 Side Drive Coupling V5

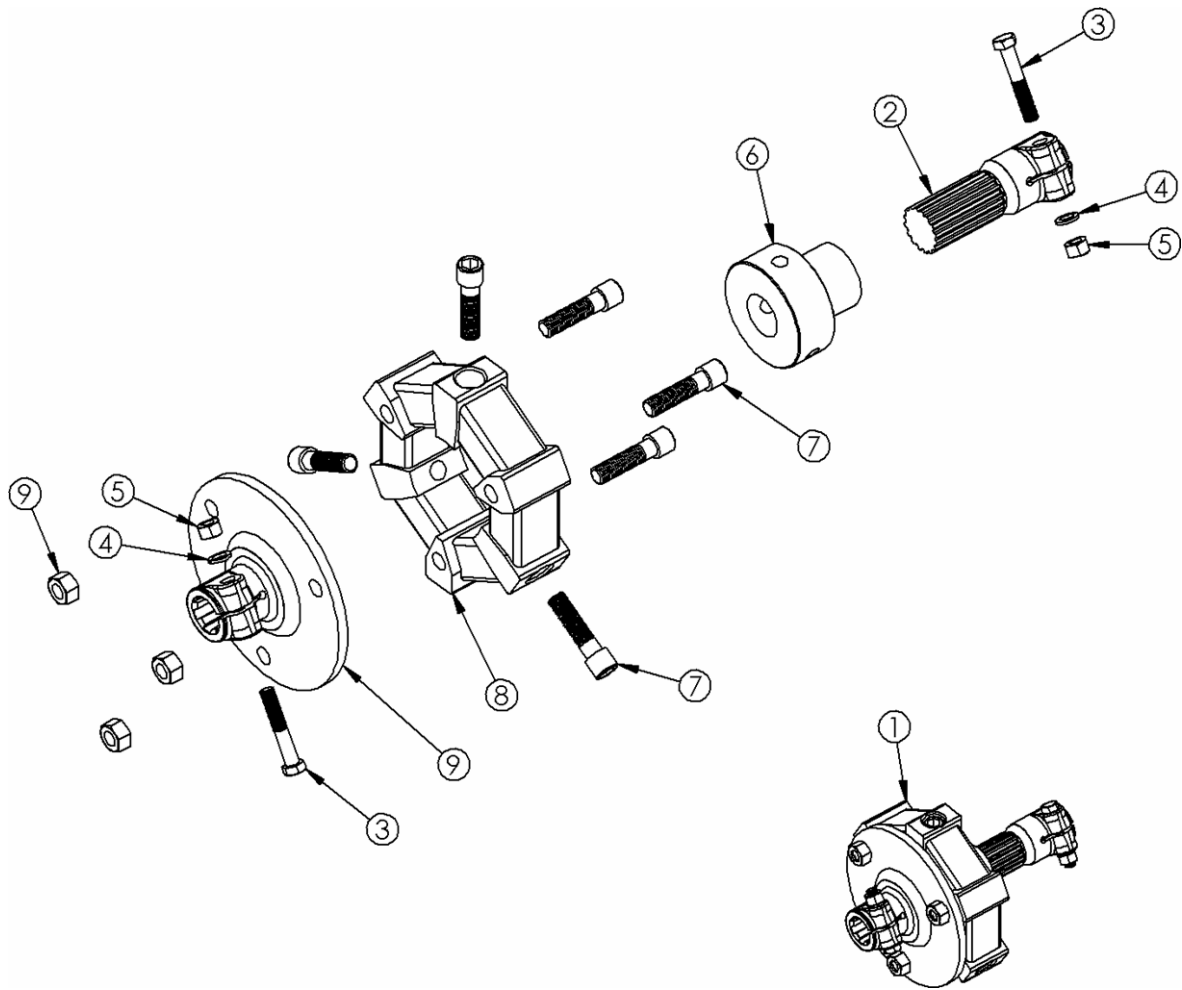


Item	Part Number	Description	Quantity
1	700-0488-1	Drive Coupling, Complete, 2300	2
2	700-0575-1	Male star 6 spline with lock screw hub	1
3	GSC12X30A	Grub Screw, Allen Head M12x30	2
4	N12	Nut, M12	2
5	700-0568	Female star 6 spline with hub	1
6	SC16X65SC	Cap Screw, Allen Head M16x65	6
7	700-0231	Centaflex, Size 30	1
8	700-0580	Flange Plate (V2)	1
9	NN16	Nut, Nyloc M16	3

Note: All versions of flange plate (#8) are able to interchange.

Note: Not all parts may be available. Advisable to upgrade to the later version coupling.

TM2300 Side Drive Coupling V6

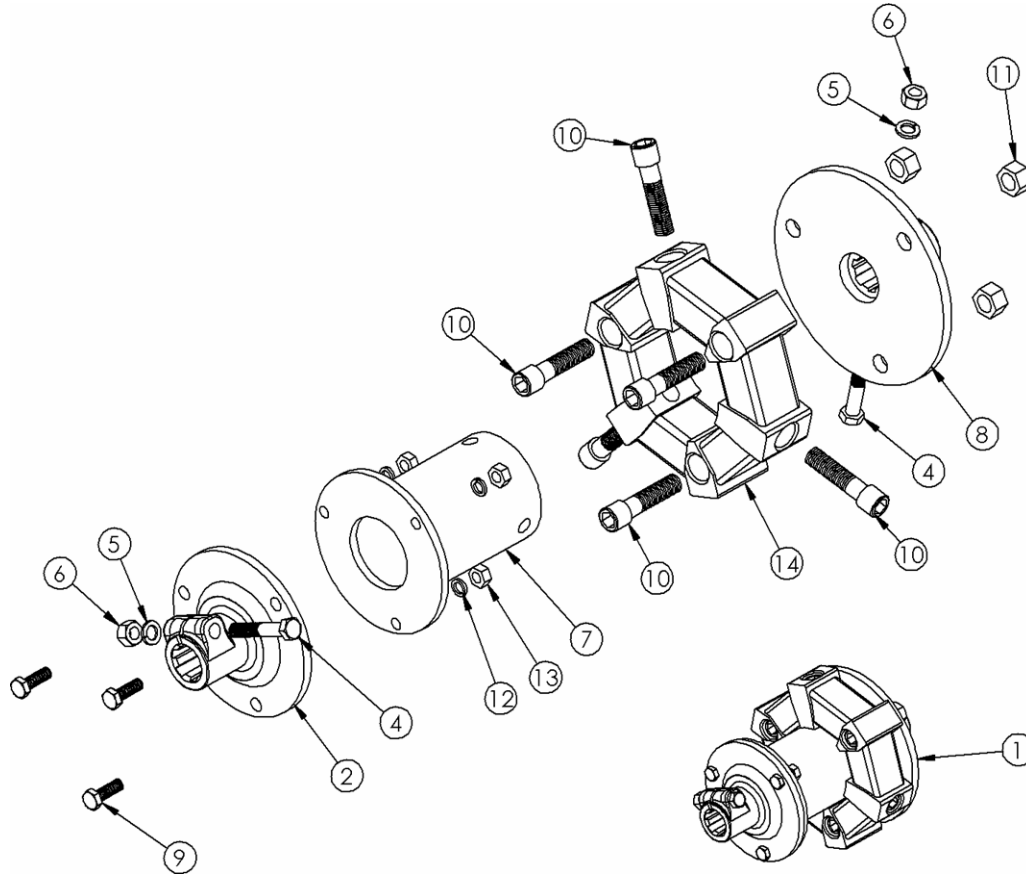


Item	Part Number	Description	Quantity
1	700-0488-2	Drive Coupling, Complete, 2300	2
2	700-0575-2	Male 16 spline with pinch bolt hub	1
3	B12x70x1.25	Bolt, M12x70x1.25	2
4	WASG12	Washer, Spring M12	2
5	N12x1.25	Nut, M12x1.25	2
6	700-0553	Female 16 spline with hub	1
7	SC16x65SC	Cap Screw, Allen Head, M16x65	6
8	700-0231	Centaflex, Size 30	1
9	700-0580	Flange Plate (V3)	1
10	NN16	Nut, Nyloc M16	3

Note: All versions of flange plate (#9) are able to interchange.

Note: Not all parts may be available. Advisable to upgrade to the later version coupling.

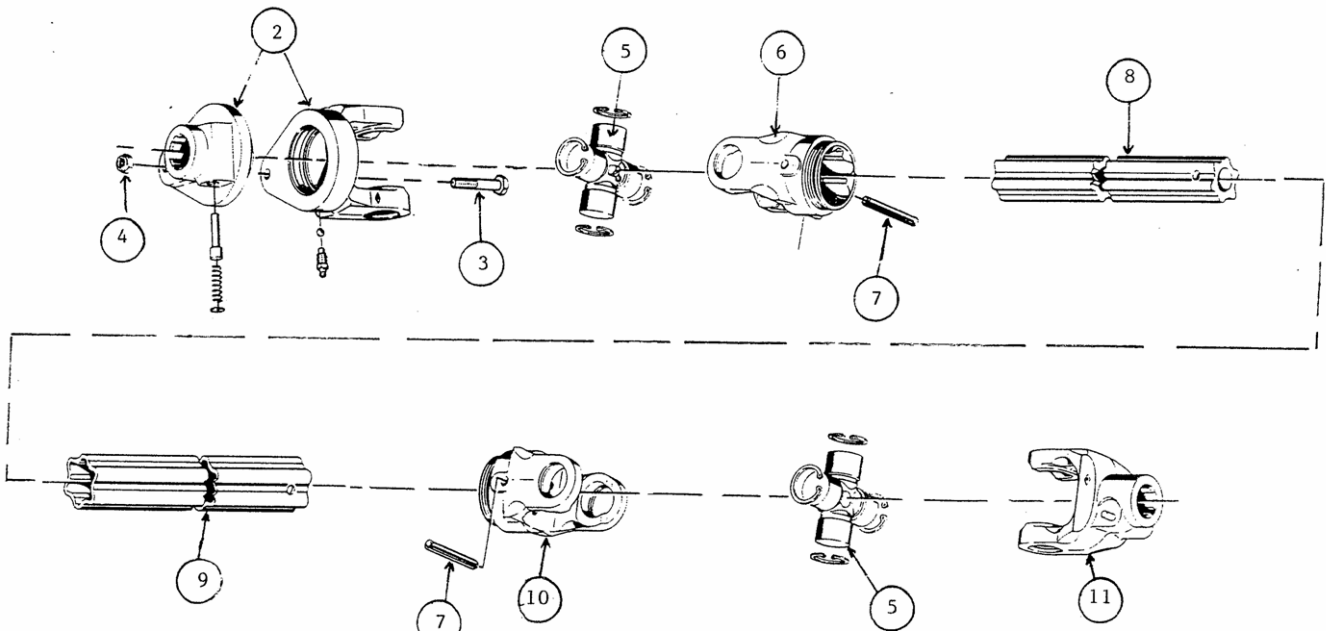
TM2300 & TM2700 Side Drive Coupling V7



Item	Part Number	Description	Quantity	
			2300	2700
1	700-0488-3	Drive Coupling, Complete, 2300	2	
1	700-0490-3	Drive Coupling, Complete, 2700		2
2	700-0585	Flange plate	1	1
4	B12x70x1.25	Bolt, M12x70x1.25	2	2
5	WASG12	Washer, Spring M12	2	2
6	N12x1.25	Nut, M12x1.25	2	2
7	700-0593	Flanged hub – 2300	2	
7	700-0597	Flanged hub – 2700		2
8	700-0580	Flange plate (V3)	1	1
9	B10X30	Bolt, M10x30	3	3
10	SC16x65SC	Cap Screw, Allen Head, M16x65	6	6
11	NN16	Nut, Nyloc M16	3	3
12	WASG10	Washer, Spring M10	3	3
13	NN10	Nut, Nyloc M10	3	3
14	700-0231	Centaflex, Size 30	1	1

Note: All versions of flange plate (#8) are able to interchange.

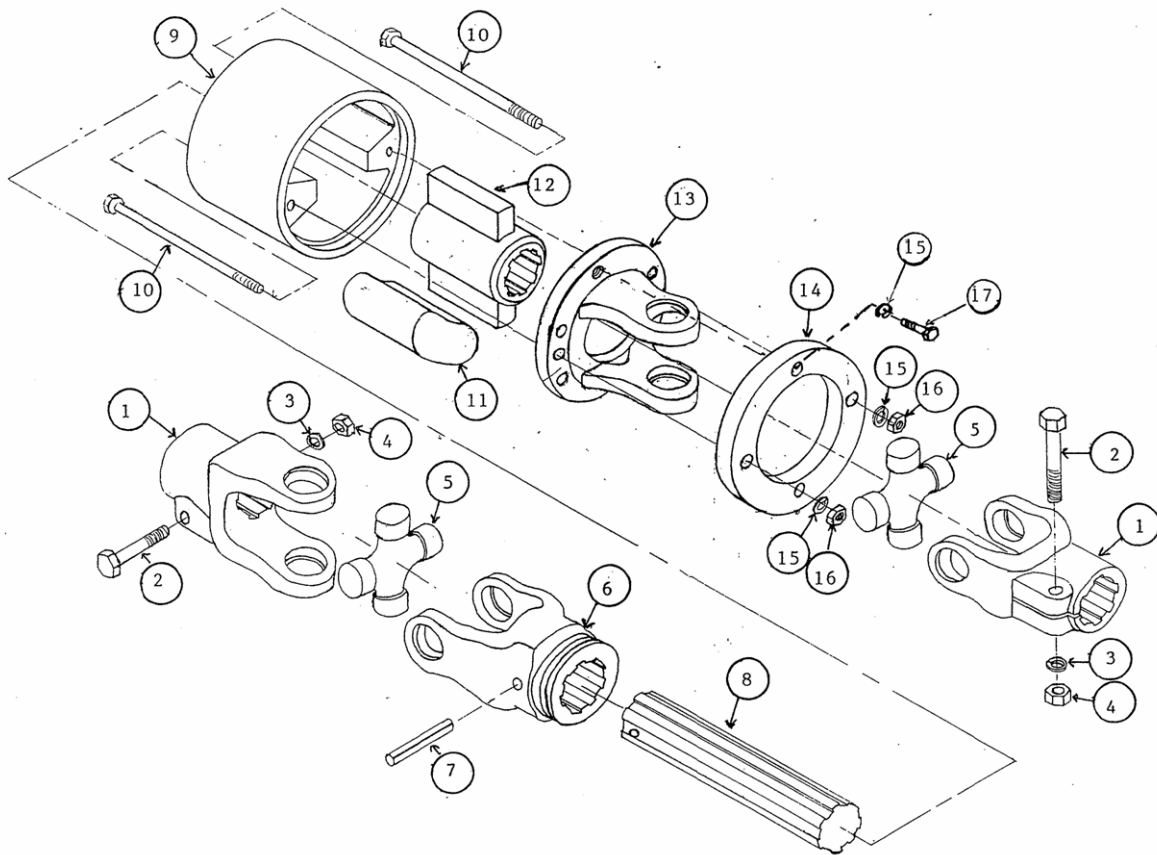
TM3000 Side Drive Coupling V1



Item No.	Giltrap Part #	Description	Qty
1	700-0462	Side Drive TM3000 V1 Complete	2
2	700-0658	Yoke with Shear Bolt - Modified	2
3	B12x60	Shear Bolt - 10.9	2
4	NN12	Nut - Nyloc M12	2
5	PTO35.00.00	U Joint	4
6	PTO35.13.100	Yoke	2
7	RP10x80	Roll Pin	4
8	PTO75.44.00	Star Tube Inner	2
9	PTO75.45.00	Star Tube Outer	2
10	PTO35.14.100	Yoke - Star Outer	2
11	PTO35.10.00	Yoke	2

Note: Not all parts may be available.

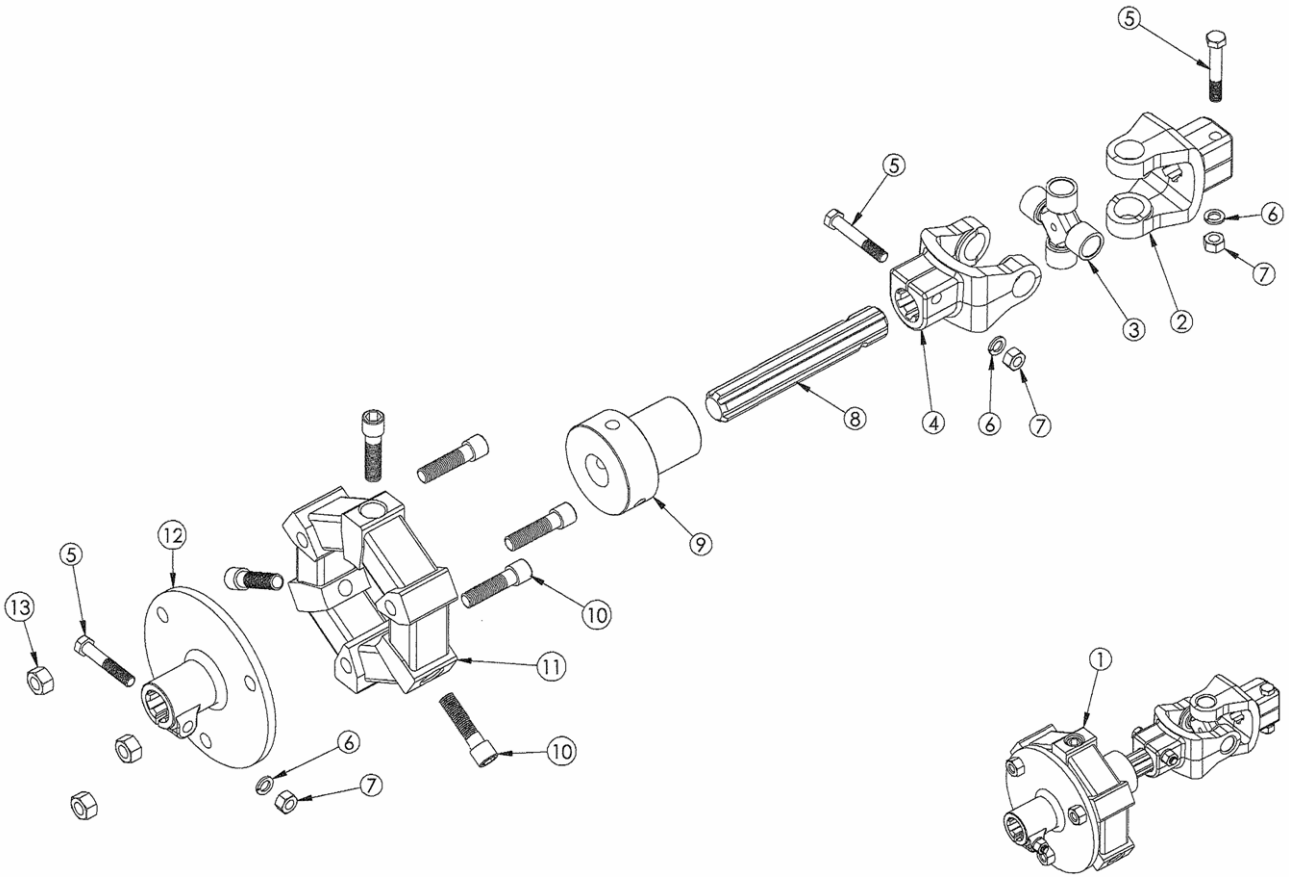
TM3000 Side Drive Coupling V2



Item No.	Giltrap Part #	Description	Qty
-	700-0469	Side Drive TM3000 V2 Complete	2
1	700-0644	Yoke Splined - Modified	4
2	BF1/2x3-1/2	Bolt	4
3	WASG12	Spring Washer	4
4	NNF1/2	Nut - Nyloc	4
5	PTO35.00.00	Universal Yoke (32 x 76) FP 02.600	4
6	PTO35.20.105	Yoke Splined 35.20.100	2
7	RP10x85	Roll Pin	2
8	PTO67.38.05	Shaft 8-splined 42x170mm	2
9	700-0014	Aluminium Housing TM3000	2
10	B12x140	Bolt	2
11	700-0399	Rubber Block	8
12	700-0427	Shaft Splined - Modified	2
13	700-0280	Flange – Modified 35.20.105 or 35.20.100	2
14	700-0385	Plate - TM3000 Side Drive V2	2
15	WASG12	Spring Washer	4
16	N12	Nut	2
17	B12x25	Bolt	2

Note: Not all parts may be available.

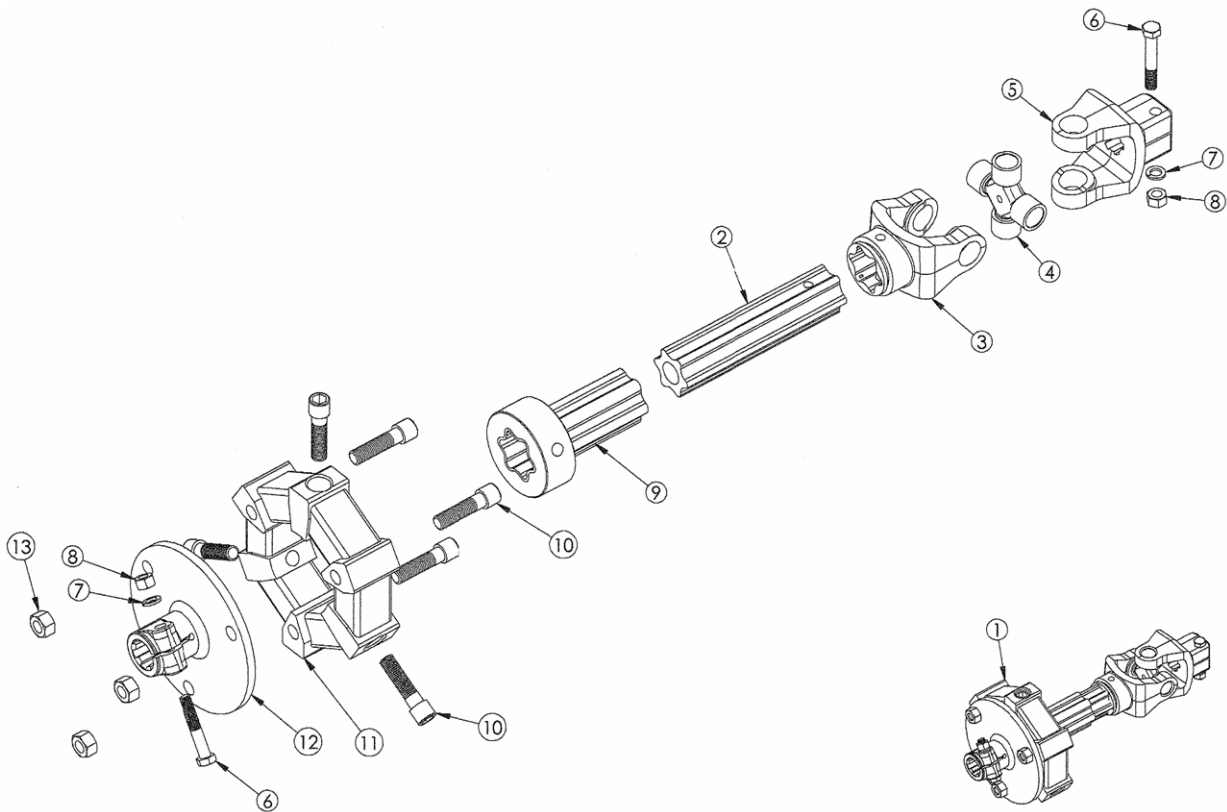
TM3000 Side Drive Coupling V3



Item No.	Giltrap Part #	Description	Qty
1	700-0476	Complete assembly	1
2	700-0649	Yoke A6 - Modified Bypy	2
3	-	U Joint 41206	1
4	700-0649	Yoke A6 - Modified Bypy 509060352	2
5	B12x70x1.25	Bolt	2
6	WASG12	Spring Washer	2
7	N12x1.25	Nut	2
8	700-0434	Shaft - Hardened 1-3/8" 6 spline	1
9	700-0560	Female 6 spline with hub	1
10	SC16x65SC	Cap Screw, Allen Head, M16x65	6
11	700-0231	Centaflex, Size 30	1
12	700-0580	Flange Plate (V1)	1
13	NN16	Nylock Nut	3

Note: Not all parts may be available. Advisable to upgrade to the later version coupling.

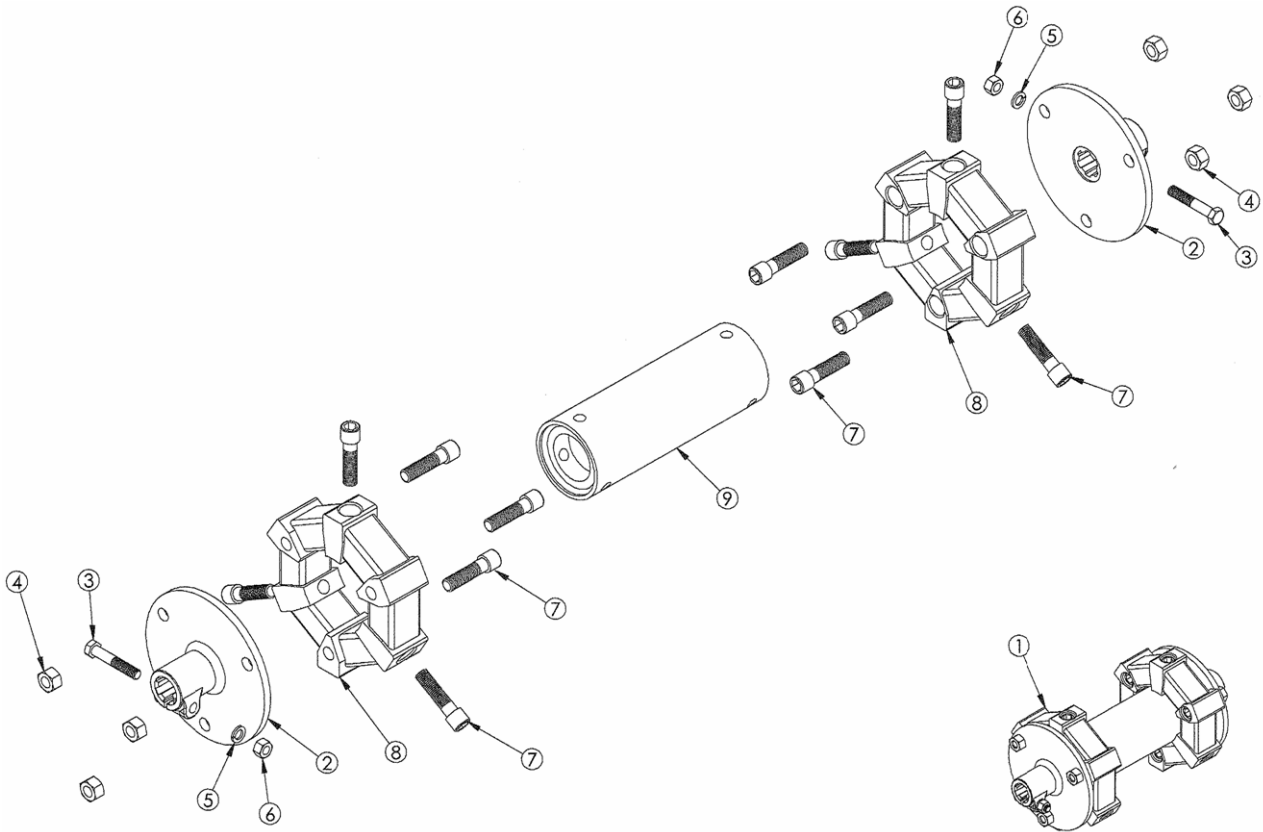
TM3000 Side Drive Coupling V4



Item No.	Giltrap Part #	Description	Qty
1	700-0483	Complete assembly	1
2	PTO75.44.00	Male star 6 spline solid	1
3	PTO22.10.02	Yoke	1
or	PTO35.10.00	Yoke	1
4	PTO22.00.00	U Joint	1
or	PTO35.00.00	U Joint	1
5	PTO22.11.01	Yoke with pinch bolt	1
or	PTO.35.13.100	Yoke with pinch bolt	1
6	B12x70x1.25	Bolt	2
7	WASG12	Spring Washer	2
8	N12x1.25	Nut	2
9	700-0570	Female star 6 spline with hub	1
10	SC16x65SC	Cap Screw, Allen Head, M16x65	6
11	700-0231	Centaflex, Size 30	1
12	700-0580	Flange Plate (V1)	1
13	NN16	Nylock Nut	3
-	RP10x80	Roll pin (not shown)	1

Note: Not all parts may be available. Advisable to upgrade to the later version coupling.

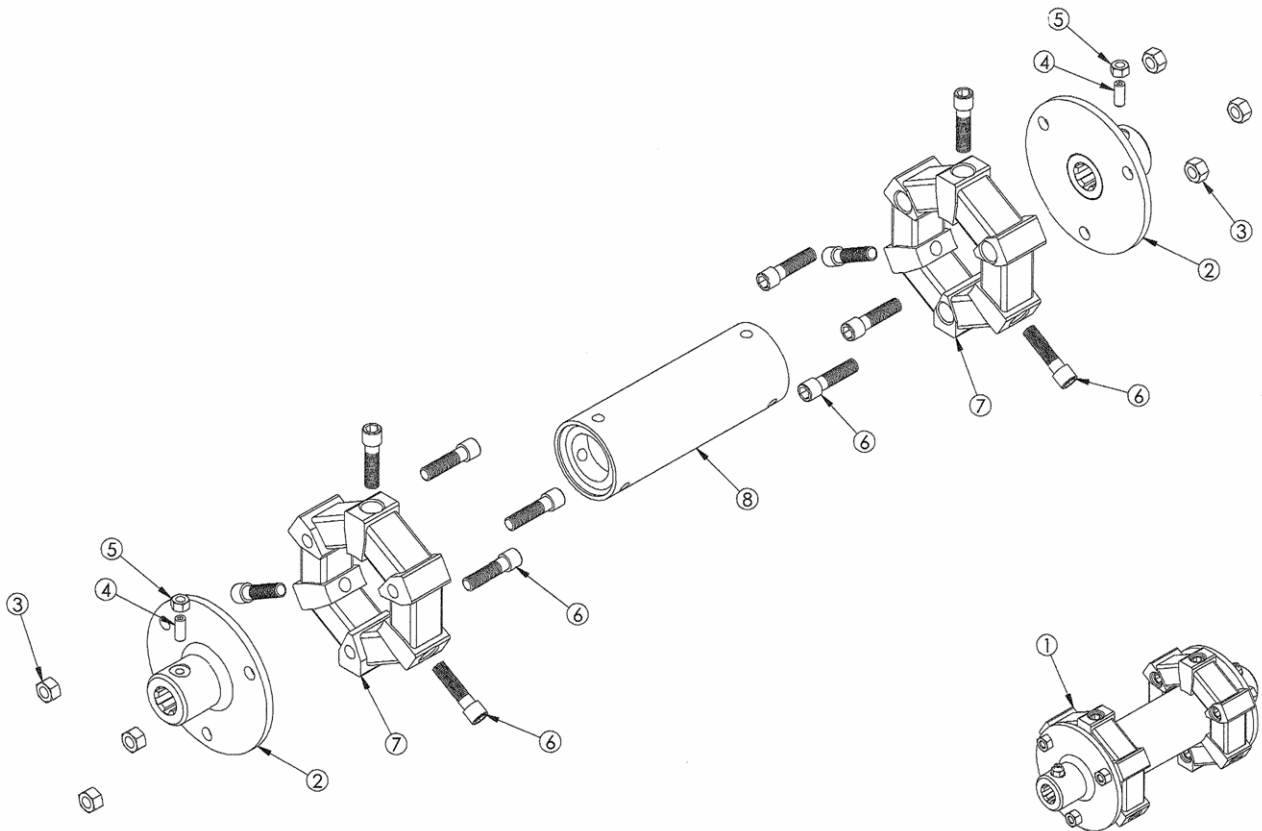
TM3000 Side Drive Coupling V5



Item No.	Giltrap Part #	Description	Qty
1	700-0485	Complete assembly	1
2	700-0580	Flange Plate (V1)	2
3	B12x70x1.25	Bolt	2
4	NN16	Nylock Nut	6
5	WASG12	Spring Washer	2
6	N12x1.25	Nut	2
7	SC16x65SC	Cap Screw, Allen Head, M16x65	12
8	700-0231	Centaflex, Size 30	2
9	700-0562	Centre tube coupling	1

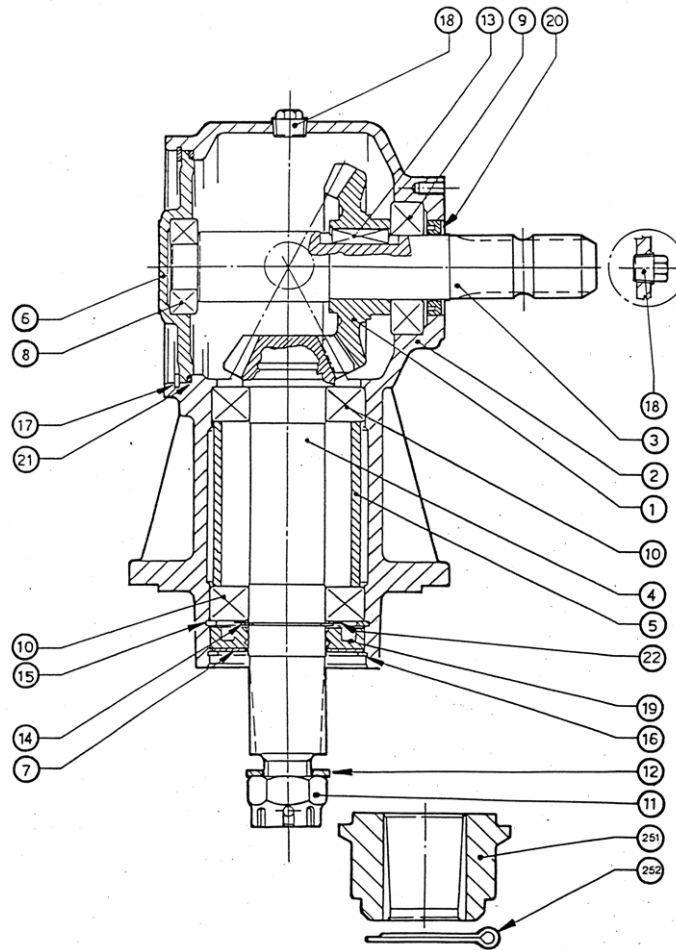
Note: Not all parts may be available. Advisable to upgrade to the later version coupling.

TM3000 Side Drive Coupling V6



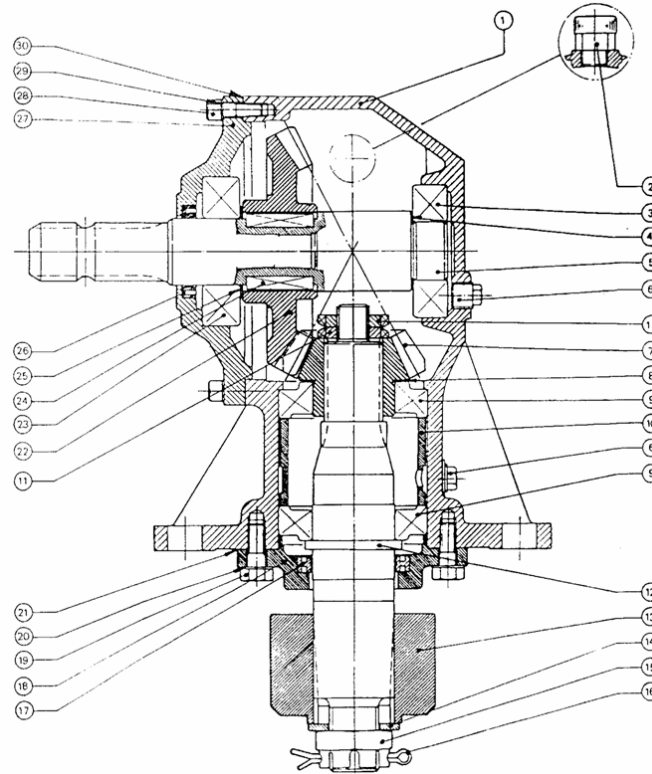
Item No.	Giltrap Part #	Description	Qty
1	700-0485-1	Complete assembly	1
2	700-0580	Flange Plate (V2)	2
3	NN16	Nylock Nut	6
5	N12	Nut	2
6	SC16x65SC	Cap Screw, Allen Head, M16x65	12
7	700-0231	Centaflex, Size 30	2
8	700-0562	Centre tube coupling	1

Comer Gearbox LF-135A (1.93:1 Ratio)



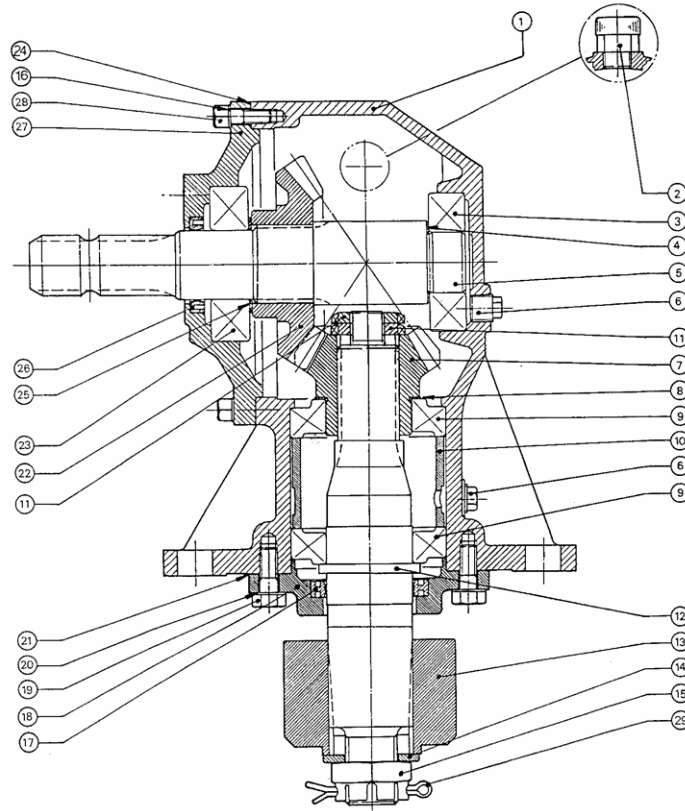
Item	Giltrap Part #	Description	Mfrs or Std #	Qty
1	C0.135.5000.00	Crown Wheel 23T	0.135.5000.00	1
2	-	Housing	0.135.0301.00	1
3	C0.135.2001.00	Shaft	0.135.2001.00	1
4	C0.135.6001.00	Pinion Shaft 12T	0.135.6001.00	1
5	C0.135.7101.00	Spacer	0.135.7101.00	1
6	-	Cover	0.135.1301.00	1
7	-	Protective Shield	1.135.7100.00	1
8	BRG6205-2RS1	Bearing 6205	8.0.1.00034	1
9	BRG6207-2RS1	Bearing 6207	8.0.1.00870	1
10	BRG6208-2RS1	Bearing 6208	8.0.1.00871	2
11	C8.2.2.00515	Castle Nut - M24x2	8.2.2.00515	1
12	-	Washer	8.3.2.00409	1
13	-	Parallel Key 10x8x30	8.4.1.00993	1
14	CCE40	External Circlip 40 UNI7435	8.5.1.00029	1
15	-	Internal Circlip 80 UNI7437	8.5.2.00030	1
16	-	Shoulder Ring SB81	8.5.3.00955	1
17	-	Shoulder Ring SB125	8.5.3.01057	1
18	-	Plug - 3/8" Gas	8.6.5.00006	2
19	-	Dust Excluder 40x80x12	8.7.1.00748	1
20	SL35527	Oil Seal 35x52x7	8.7.3.00028	1
21	-	O-Ring OR-4462	8.7.6.01058	1
22	-	Shim 40.3x51.5	0.244.7500.00	1
251	-	Hub	0.135.7500.00	1
252	SP5x50	Split Pin 5x50	8.4.7.00516	1

Gearbox – Comer LF17A-116.806 (1.93:1 Ratio)



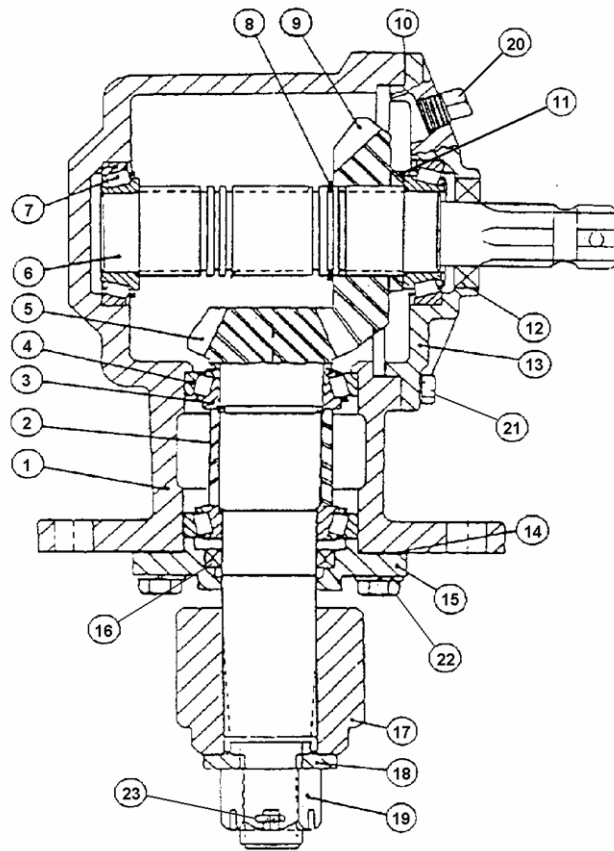
Item	Giltrap Part #	Description	Mfrs or Std #	Qty
1	-	Casing	0.116.0303.02	1
2	SP4x50	Cotter Pin B4x50	SP4x50	1
3	BRG6307	Bearing 6307	BRG6307	1
4	-	Shim 48.0	0.259.7500.00	1
5	-	Shaft 1 3/8"	0.116.2002.00	1
6	-	Plug 3/8 Gas	8.6.5.00006	3
7	-	Pinion Z14 M5,64	0.116.6005.00	1
8	-	Shim 70.3	0.712.7500.00	1
9	BRG30210	Bearing 30210	8.0.9.00469	2
10	-	Spacer	0.116.7102.01	1
11	-	Spacer	0.132.7109.00	1
12	-	Shaft ASA DP 8/16	0.116.3203.00	1
13	B8x22	Bolt M8x22 8.8	B8x22	8
14	-	Blank Washer	1.129.7103.00	1
15	-	Castle Nut M30x2 PR80	8.2.2.00555	1
16	-	Gasket	0.116.7202.00	1
17	SL50x68x10	Double Lip Seal 50x68x10	SL50x68x10	1
18	-	Cover	0.116.1701.04	1
19	B10x25	Bolt M10x25 8.8	B10x25	4
20	WASG10	Spring Washer 10.5x16x1.5	WASG10	4
21	-	Gasket	0.116.7203.00	1
22	-	Gear Z27 M5,64	0.130.5001.00	1
23	BRG6308	Bearing 6308	BRG6308	1
24	WASG8	Spring Washer 8.4x13x1.2	WASG8	8
25	-	Shim 51.5	0.244.7500.00	1
26	SL40568	Oil Seal 40x56x8	SL40568	1
27	-	Cover	0.116.1301.01	1
28	-	Nut M30x1.5	0.132.7106.00	1
251	-	Oil Filler Plug 3/8G	8.6.7.00161	1
252	SP6X60	Cotter Pin B6x60	8.4.7.00146	1

Gearbox – Comer LF17A-116.805 (1.49:1 Ratio)



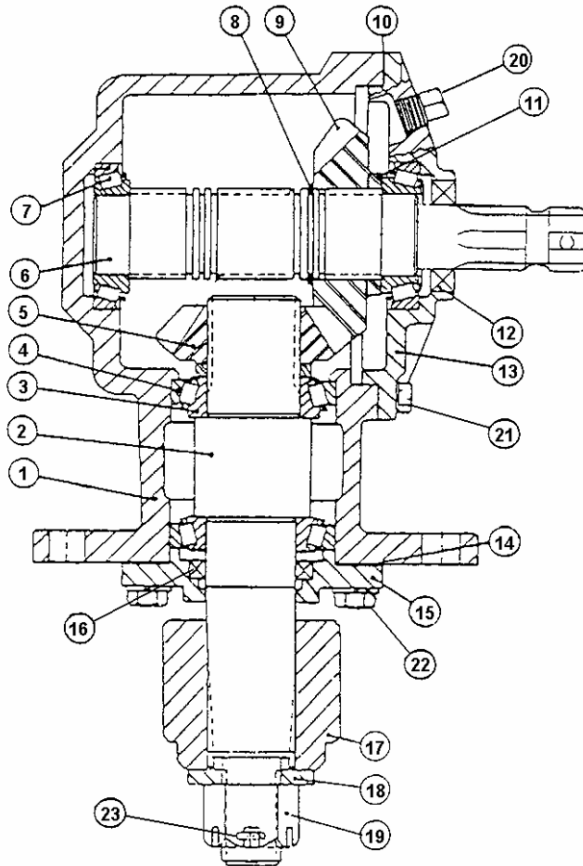
Item	Giltrap Part #	Description	Mfrs or Std #	Qty
1	C0.116.0303.02	Casing	0.116.0303.02	1
2	C0.116.1301.01	Cover	0.116.1301.01	1
3	BRG6307-2RS1	Bearing 6307	8.0.1.00049	1
4	C0.259.7500.00	Shim 48.0	0.259.7500.00	1
5	C0.116.2002.00	Shaft 1 3/8"	0.116.2002.00	1
6	C8.6.5.00006	Plug 3/8 Gas	8.6.5.00006	3
7	C0.116.6204.00	Pinion Z14 M5,7	0.116.6204.00	1
8	-	Shim 70.3	0.712.7500.00	1
9	BRG30210J2	Bearing 30210	8.0.9.00469	2
10	-	Spacer	0.116.7102.01	1
11	C0.132.7106.00	Nut M30x1.5	0.132.7106.00	1
12	C0.116.3203.00	Shaft ASA DP 8/16	0.116.3203.00	1
13	B8x22	Bolt M8x22 8.8	8.1.1.00041	8
14	-	Blank Washer	1.129.7103.00	1
15	C8.2.2.00555	Castle Nut M30x2 PR80	8.2.2.00555	1
16	WASG8	Spring Washer 8.4x13x1.2	8.3.7.00140	8
17	SL506810	Double Lip Seal 50x68x10	8.7.2.00545	1
18	C0.116.1701.04	Cover	0.116.1701.04	1
19	B10x25	Bolt M10x25 8.8	8.131300061	4
20	WASG10	Spring Washer 10.5x16x1.5	8.3.7.00324	4
21	C0.116.7203.00	Gasket	0.116.7203.00	1
22	C0.132.6004.00	Gear Z21 M5,7	0.132.6004.00	1
23	BRG6308-2RS1	Bearing 6308	8.0.1.0050	1
24	C0.116.7202.00	Gasket	0.116.7202.00	1
25	C0.244.7500.00	Shim 51.5	0.244.7500.00	1
26	SL40568	Oil Seal 40x56x8	8.7.3.00044	1
27	SP4x50	Cotter Pin B4x50	8.4.7.01111	1
251	C8.6.7.00161	Oil Filler Plug 3/8G	8.6.7.00161	1
252	SP6x60	Cotter Pin B6x60	8.4.7.00146	1

Gearbox - Bare-Co B6667 (1.93:1 Ratio)



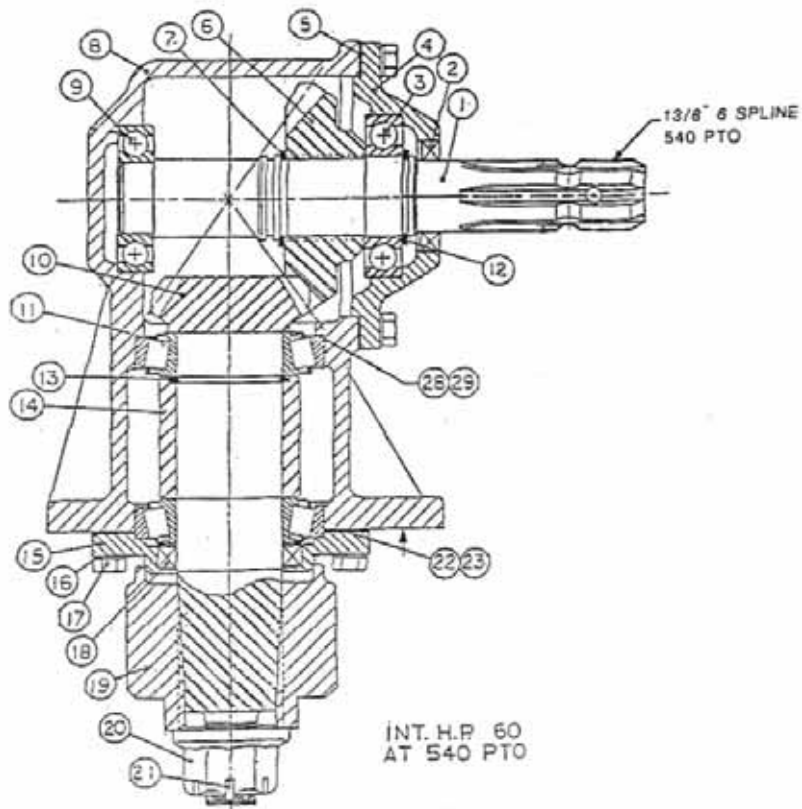
Item	Giltrap Part #	Description	Mfrs or Std #	Qty
1	-	Main Housing	B6916	1
2	-	Spacing Tube	B7391	1
3	-	Bearing Cone Nachi 368A	B91	2
4	-	Bearing Cup NTN 4T382	B93	2
5	GBB6914	15 Tooth Output Pinion	B6914	1
6	GBB6911	Input Shaft - 1 3/8" x 6 splines	B6911	1
7	GBB65	Bearing Cup NTN 4T-LM803014 & Cone LM803048	B65	2
8	-	Retaining Ring	B7389	1
9	GBB6913	29 Tooth Input Pinion	B6913	1
10	-	Shim Gasket	B6675	as reqd.
11	-	Spacer	B7390	1
12	GBB2955	Input Seal TC12079 1.375 x 2.375 x 0.375	B2955	1
13	-	Input Cap	B6918	1
14	-	Shim Gasket	B6837	as reqd.
15	-	Lower Seal Housing	B79	1
16	GBB2956	Output Seal 6807 2.000 x 2.687 x 0.375	B2956	1
17	-	Hub	B4158	1
18	GBB7387	Flat Washer - 1" I.D	B7387	1
19	-	Castle Nut - 1" x 14 TPI	B7388	1
20	-	Breather Plug	B7687	1
21	-	Bolt	-	8
22	-	Bolt	-	4
23	-	Split Pin	-	1

Gearbox - Bare-Co B2667 (1.46:1 Ratio)



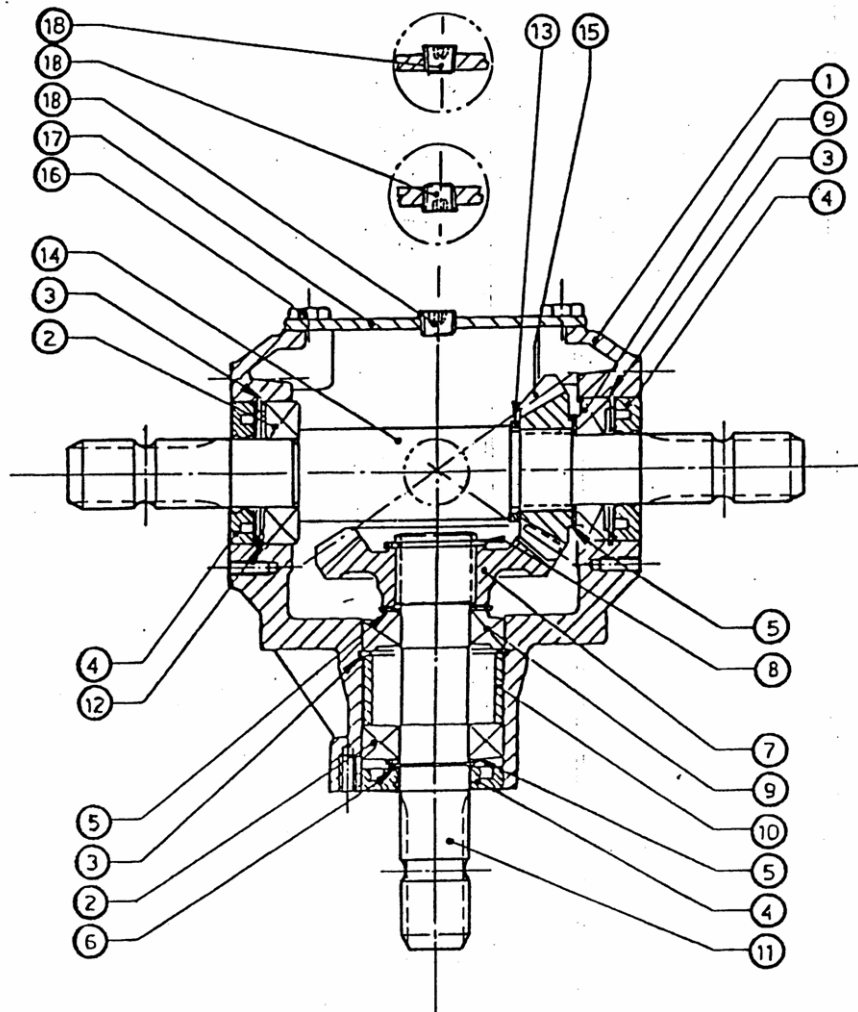
Item	Giltrap Part #	Description	Mfrs or Std #	Qty
1	-	Main Housing	B6916	1
2	-	Output Shaft	B6912	1
3	-	Bearing Cone NTM 4T-368	B91	2
4	-	Bearing Cup NTN 4T-382	B93	2
5	-	13 Tooth Output Pinion	B6677	1
6	GBB6911	Input Shaft - 1 3/8" x 6 splines	B6911	1
7	GBB65	Bearing Cup NTN 4T-LM803014 & Cone LM803049	B65	2
8	-	Retaining Ring	B7389	1
9	-	19 Tooth Input Pinion	B59	1
10	-	Shim Gasket	B6675	as reqd.
11	-	Spacer	B7390	1
12	GBB2955	Input Seal TC12079 1.375 x 2.375 x 0.375	B2955	1
13	-	Input Cap	B6918	1
14	-	Shim Gasket	B6837	as reqd.
15	-	Lower Seal Housing	B79	1
16	GBB2956	Output Seal 6807 2.000 x 2.687 x 0.375	B2956	1
17	-	Hub	B4158	1
18	GBB7387	Flat Washer - 1" I.D	B7387	1
19	-	Castle Nut - 1" x 14 TPI	B7388	1
20	-	Breather Plug	B7687	1
21	-	Bolt	-	
22	-	Bolt	-	
23	-	Split Pin	-	

Gearbox A052/1.90 (1.90:1 Ratio)



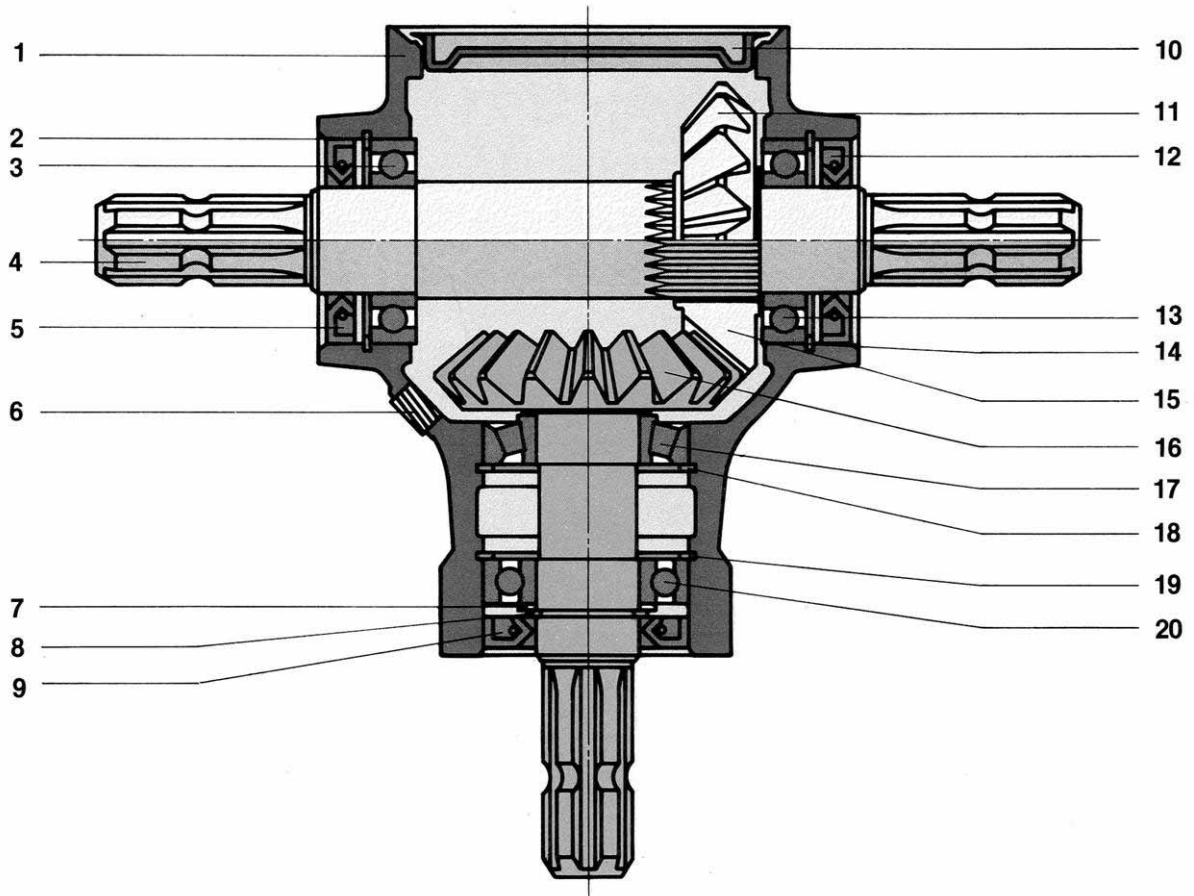
Item	Giltrap Part #	Description	Mfrs or Std #	Qty
1	-	Input Shaft		1
2	SL355210	Seal	35x52x10	1
3	BRG6208-2RS1	Bearing 6208		1
4	-	Front Cover		1
5	-	Gasket		as reqd.
6	-	Crown Wheel 23T		1
7	-	Snap Ring 42ID		1
8	-	Housing		1
9	BRG6207-2RS1	Bearing 6207		1
10	-	Pinion Shaft 12T		1
11	-	Shim		as reqd.
12	-	Snap Ring		1
13	-	Snap Ring		1
14	-	Spacer		1
15	-	Cover		1
16	-	Spring Washer		4
17	B10x35	Bolt	M10x35	4
18	SL506810	Seal	50x68x10	1
19	-	Hub		1
20	-	Castle Nut - M30x2		1
21	SP60x6	Split Pin		1
22	-	Gasket		as reqd.
23	-	Gasket		as reqd.
25	-	Breather		1
26	-	Oil Level Plug		1
28	BRG7210-2RS1	Bearing 7210		1
29	BRG7210-2RS1	Bearing 7210		1

Gearbox - Comer T27A-267.042 (1.46:1 Ratio)



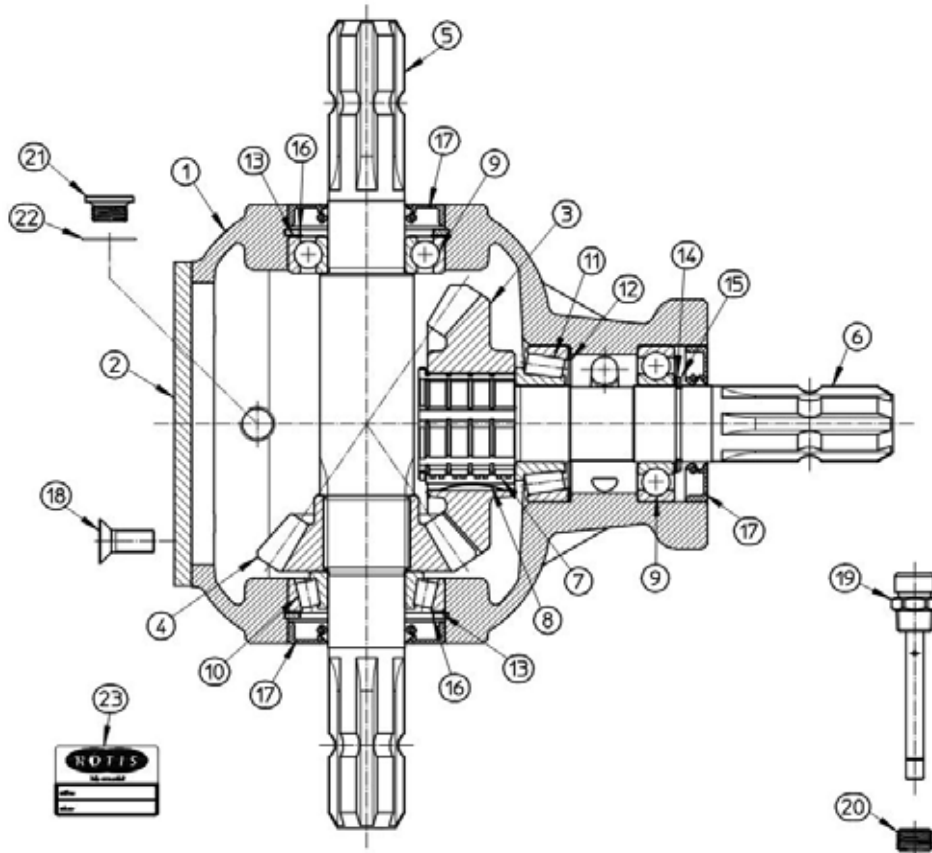
Item	Giltrap Part #	Description	Mfrs or Std #	Qty
1	C0.267.0300.00	Casing	0.267.0300.00	1
2	BRG6207-2RS1	Bearing 6207	8.0.1.00025	2
3	-	Snap Ring 72 UN 17437	8.5.2.00131	3
4	SL357212	Double Lip Seal 35x72x12	8.7.1.00152	3
5	C0.259.7500.00	Shim 48.0	0.259.7500.00	3
6	-	Snap Ring 35 UN 17435	8.5.1.00005	1
7	C0.144.5000.00	Gear Z22 M7	0.144.5000.00	1
8	-	Snap Ring 40 UN 17435	8.5.1.00029	1
9	BRG30207J2	Bearing 30207	8.0.9.00026	2
10	C0.267.7100.00	Spacer	0.267.7100.00	1
11	C0.267.2001.00	Shaft 1 3/8"	0.267.2001.00	1
12	C0.248.7500.00	Shim 71.7	0.248.7500.00	1
13	-	Spacer	0.132.7102.00	1
14	C0.267.3005.00	Shaft 1 3/8"	0.267.3005.00	1
15	C0.268.6003.00	Pinion Z15 M5,7	0.268.6003.00	1
16	B10x20	Bolt M10x20 8.8	8.1.1.0054	4
17	C0.267.1302.00	Cover	0.267.1302.00	1
18	C8.6.6.00201	Plug 3/8" Gas	8.6.6.00201	3

Gearbox - Bondioli 2050 (1.46:1 Ratio)



Item	Giltrap Part #	Description	Mfrs or Std #	Qty
1	-	Main Housing		1
2	-	Snap Ring		1
3	BRG6208-2RS1	Bearing 6208		1
4	-	Shaft		1
5	SL408012	Oil Seal	40x80x12	1
6	-	Oil Plug - 3/8" Gas		1
7	-	Shim		as reqd.
8	-	Snap Ring		1
9	SL408012	Oil Seal	40x80x12	1
10	-	Cover		1
11	-	Gear		1
12	SL408012	Oil Seal	40x80x12	1
13	BRG6208-2RS1	Bearing 6208		1
14	-	Snap Ring		1
15	-	Gear		1
16	-	Gear Shaft		1
17	BRG30208J2	Bearing 30208		1
18	-	Snap Ring		1
19	-	Snap Ring		1
20	BRG6208-2RS1	Bearing 6208		1

Gearbox - ROTIS (1.46:1 Ratio)



Item	Giltrap Part #	Description	Mfrs or Std #	Qty
1	-	Housing	3.915.10002	1
2	-	Cover	3.915.10009	1
3	-	Bevel gear	3.915.20002	1
4	-	Bevel pinion	3.915.20601	1
5	-	Through shaft	3.915.22005	1
6	-	Input shaft	3.915.22051	1
7	-	Key	3.936.13002	3
8	-	Key spring	3.936.13501	3
9	BRG6207-2RS1	Bearing 6207	1.25.26207	2
10	BRG30207J2	Bearing 30207	1.26.230207	1
11	BRG32207J2	Bearing 32207	1.26.232207	1
12	-	Spacer 56x72x0.2	1.07.0105607202	1
13	-	Spacer 56x72x0.5	1.07.0105607205	2
14	-	Spacer 35x45x0.5	1.07.0103504505	2
15	-	Circlip, External 35mm	1.10.02035	1
16	-	Circlip, Internal 72mm	1.10.01072	2
17	SL357210	Seal, double lipped 35x72x10	1.36.3507210	3
18	-	Screw	1.01.061025Z	4
19	-	Pressure relief plug 3/8"	1.20.2303801	1
20	-	Oil drain plug 3/8"	1.20.210380Z	1
21	-	Oil drain plug 3/8"	1.20.2003801	2
22	-	Copper/aluminium washer M16	1.06.0716	2
23	-	Identity tag	3.936.12501	1



Notes: