

**Parts**  
**Manual**  
**145 Series**  
**MR**

## **Important Information**

### **Serial Number**

It is important to make a note of the serial number and year of manufacture of your machine in the spaces provided below. This information should always be quoted in any correspondence with Dowdeswell Engineering.

When ordering spares for your machine, you should always quote the serial number and year of manufacture either to Dowdeswell's or to your dealer.

Machine Serial Number: \_\_\_\_\_

Year of manufacture: \_\_\_\_\_

### **Warranty**

Should defective material or workmanship used in the manufacture give rise to failure, the products, components or sub-assemblies affected, will be replaced free of charge during the period of warranty offered with the machine at the time of purchase. The fitting of non Dowdeswell parts, or repairs, or modifications carried out by unauthorised persons will invalidate the warranty. No work will be carried out without prior consultation with Dowdeswell Engineering Co. Ltd.

Save to the extent covered by the warranty, the company shall not be liable in any circumstances for any loss, injury or expense, whether direct or indirect, which may arise for any reason whatsoever from any defect in or otherwise in connection with any goods supplied or work done by the company.

### **Replacement Parts**

Use only genuine Dowdeswell spares as these replacement parts are designed for your machine to give the best possible performance and also have the full backing of the warranty cover. See the Parts Manual for the part number and description, when ordering spares always quote the machine serial number.

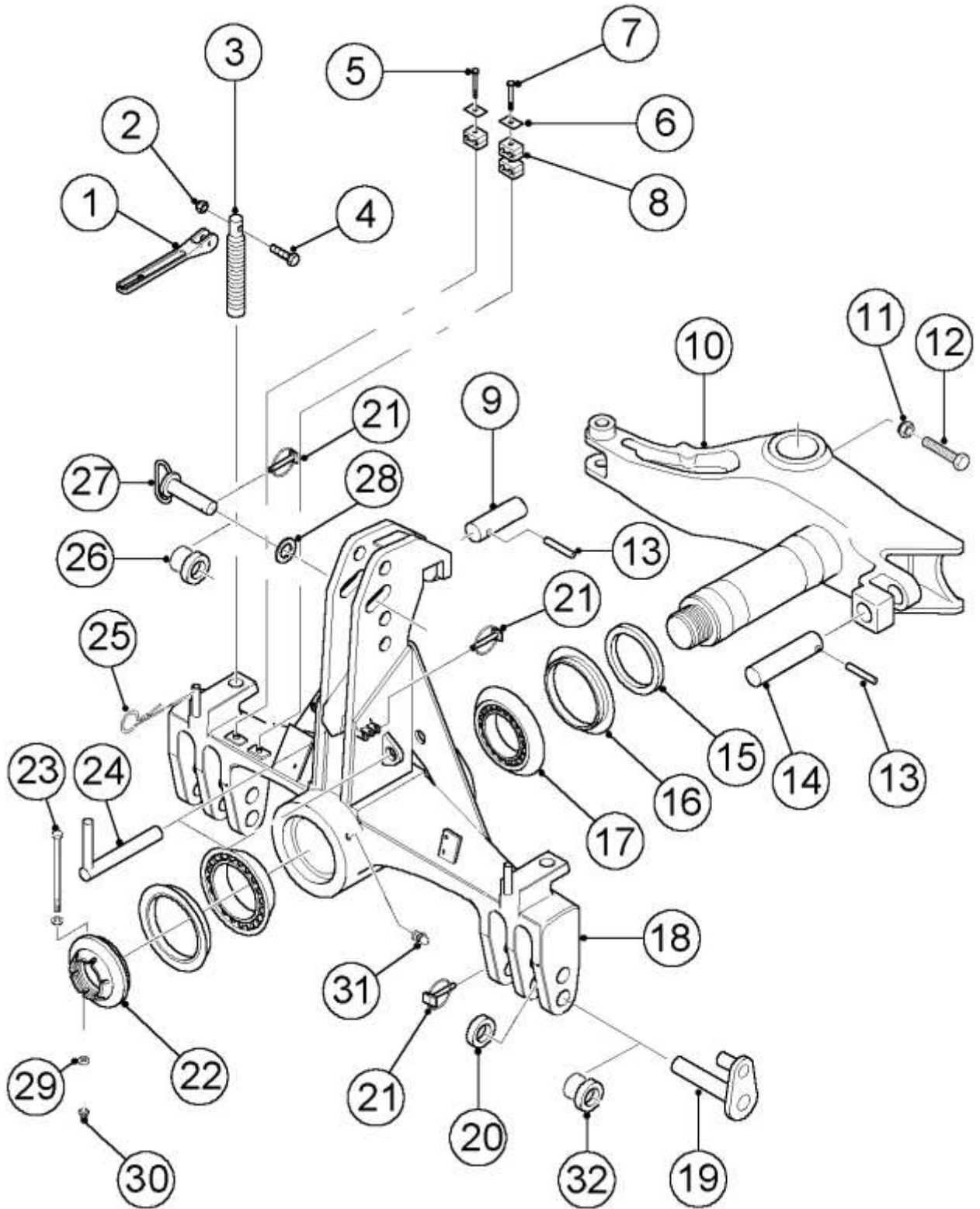
### **Definitions**

Throughout this manual the terms "Front", "Rear", "Left-hand (LH)" and "Right-hand (RH)" will be used and are derived from the tractor drivers normal position facing forward with the plough in its transport position.

The left-hand components are those which move the soil to the left, and the right-hand components are those which move the soil to the right.



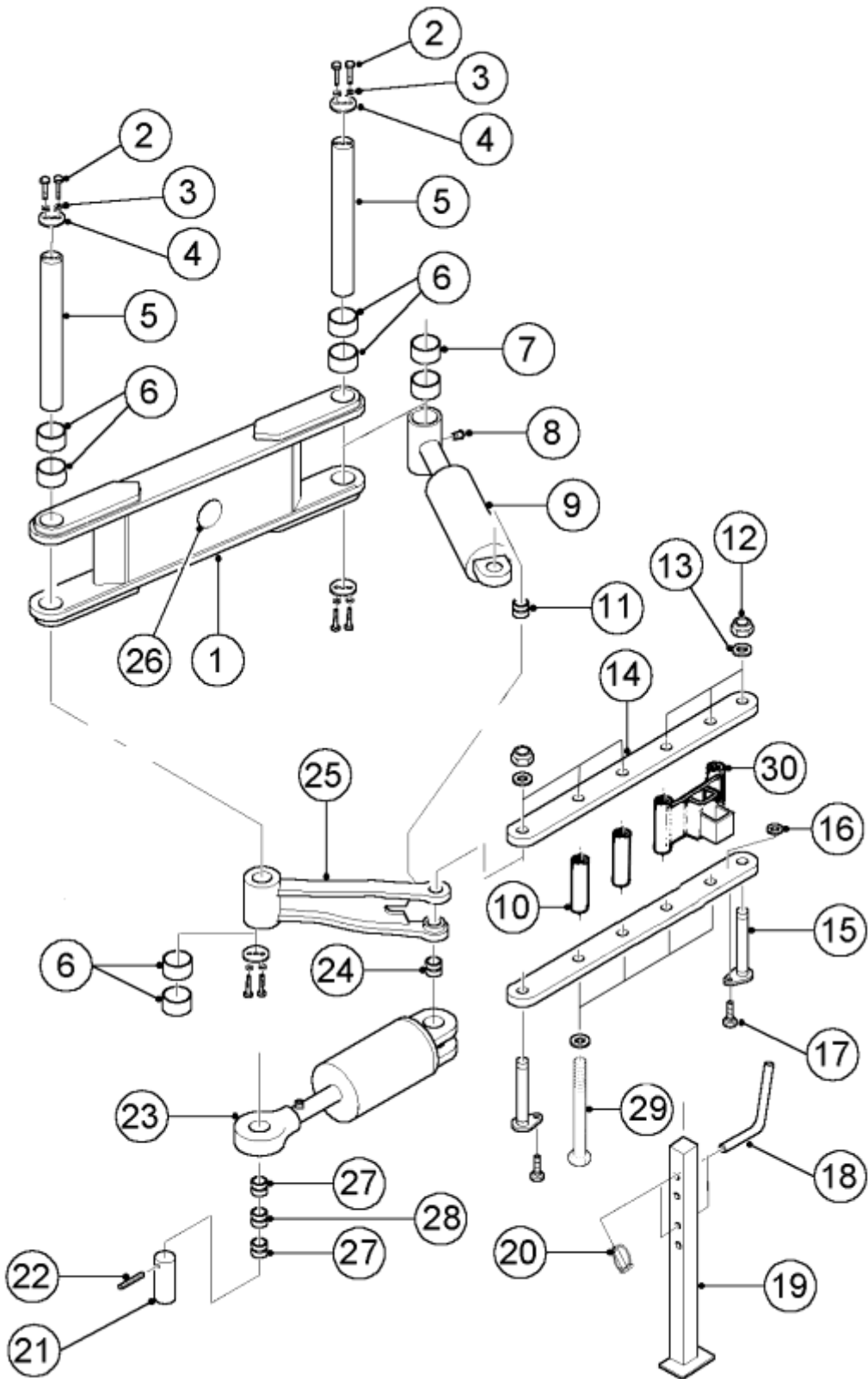
# **HEADSTOCK ASSEMBLY**



# **HEADSTOCK ASSEMBLY**

ITEM	PART N°	DESCRIPTION	QTY
1	1156300	Handle	2
2	900115	Self Locking Nut 3/8" UNF	2
3	1320500	Verticality Screw	2
4	900027	Bolt 3/8" UNF x 2 1/2"	2
5	901022	Bolt M8 x 35	1
6	901826	Cover Plate	2
7	901027	Bolt M8 x 60	1
8	901802	Hose Clamp (As Half)	6
9	1515400	Top Ram Pin	1
10	1465200	Turnover Arm	1
11	901981	Locking Nut M16	2
12	901336	Setscrew M16 x 65	2
13	900542	Spring Pin 10x 60	2
14	1373300	Bottom Ram Pin	1
15	1485000	Bearing Butt Ring	1
16	901536	Seal	2
17	901529	Bearing	2
18	1594000	Headstock	1
19	1362000	Lower Link Pin (Cat 3)	2
19a	1544700	Lower Link Pin (Cat 2/3)	-
20	1275100	Spacer Butt Ring	2
21	900527	Linch Pin	5
22	1485500	Pulling Nut	1
23	901080	Bolt M12 x 140	1
24	1482900	Headstock Transport Latch	2
25	900521	'R' Clip	2
26	1588400	Top Link Reducer Sleeve (Cat3-2)	1
27	1362100	Top Link Pin (Cat 3)	1
27a	1588300	Top Link Pin (Cat 2)	1
28	900185	Plain Washer 1 1/4" (Cat 3 Only)	1
29	901189	M12 Plain Washer	2
30	900783	M12 Nyloc Nut	1
31	900431	Grease Nipple 1/4" UNF	2
32	1544800	Bottom Link Reducer Sleeve (Cat3-2)	2

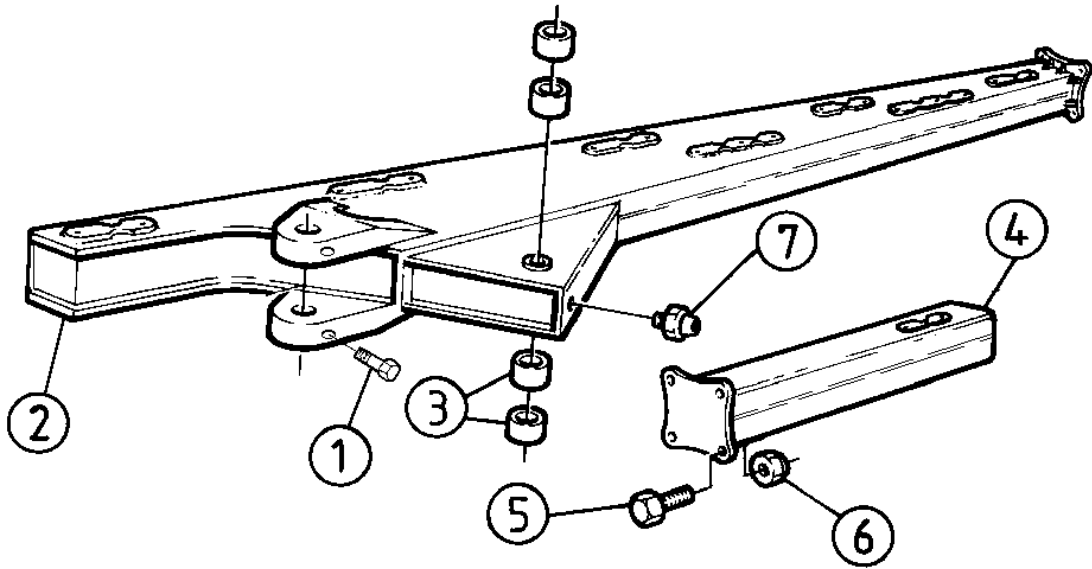
# PARALLEL LINK ASSEMBLY



# **PARALLEL LINK ASSEMBLY**

ITEM	PART N°	DESCRIPTION	QTY
1	1484400	Main Link Arm	1
2	901308	Setscrew M12 x 30	8
3	901189	Spring Water M12	8
4	1356500	Retaining Plate	4
5	1356400	Main Link Pin	2
6	903149	Internal Tension Bush	6
7	903148	Internal Tension Bush	2
8	900431	Grease Nipple ¼" UNF	4
9	-	Offset Ram Assembly (see separate page)	-
10	1585800	Parallel Link Spacer Boss	2
11	900374	Internal Tension Bush	1
12	900786	Self Locking Nut M24	6
13	901610	Plain Washer M24	10
14	1585600	Parallel Link Plate	2
15	1518300	Parallel Link Pin	2
16	900783	Self Locking Nut M12	2
17	901068	Bolt M12 x 50	2
18	1365700	Retaining Peg	2
19	1362500	Parking Stand	1
20	900521	'R' Type Grip Clip	2
21	1487000	Width Ram Eye	1
22	900548	Spring Pin 10 x 70	1
23	-	Adjustable Stroke Ram (See Separate Page)	-
24	903150	Internal tension Bush	4
25	1355900	Cross Link	1
26	1163700	Rubber Bung	1
27	900376	Internal Tension Bush	2
28	1547900	Bush Spacer	1
29	901159	Bolt M24 x 290	4
30	1585700	Parallel Link Stand Spacer Bracket	1

# MAIN BEAM ASSEMBLY

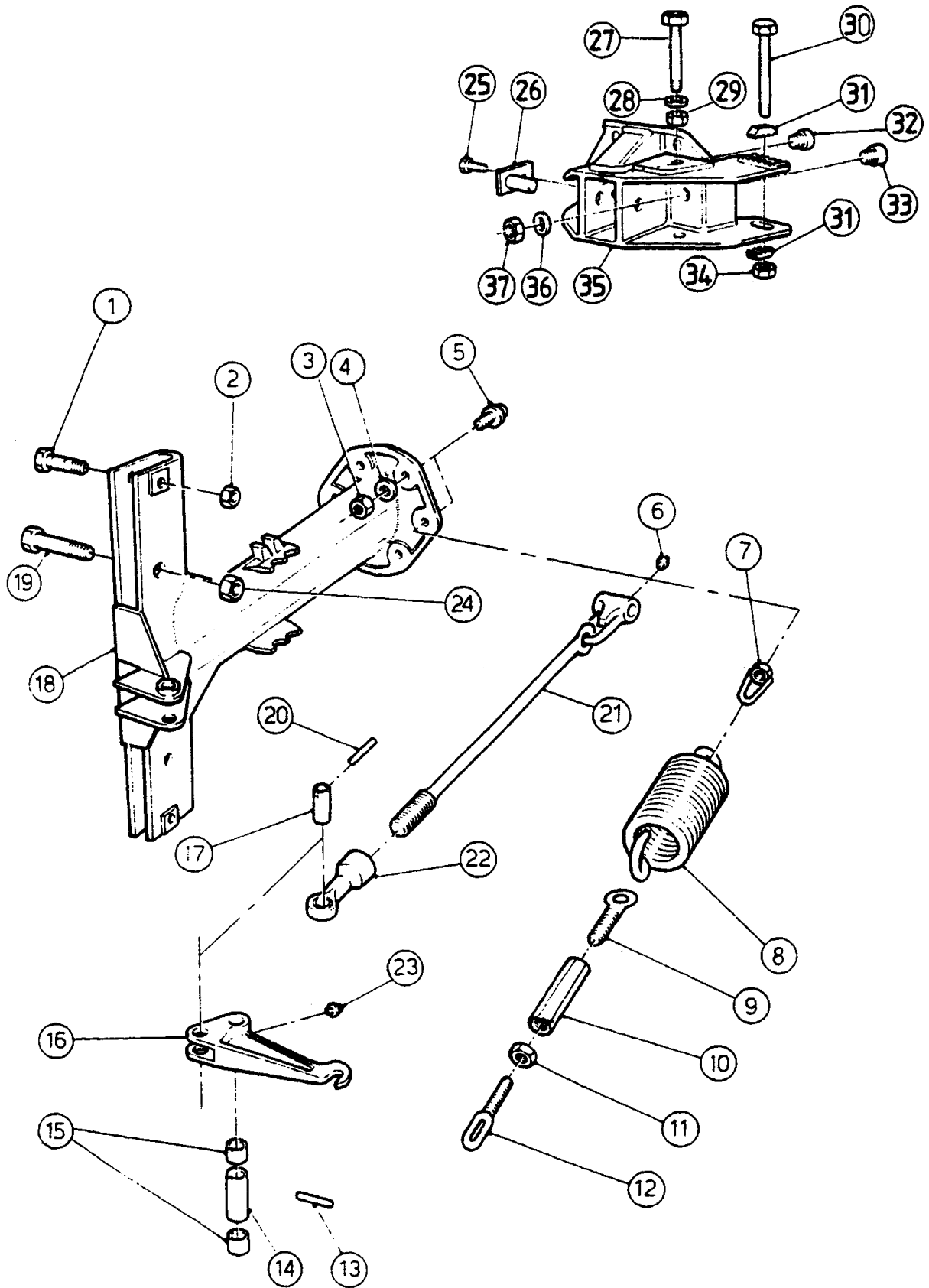




# **MAIN BEAM ASSEMBLY**

ITEM	PART N°	DESCRIPTION	QTY
1	901333	Setscrew M16 x 50	2
2	1500900	Main Beam 5F 36" MA	-
	1501000	Main Beam 6F 36" MA	-
3	900348	Plain Metal Bearing	4
4	1355500	Extension Beam MA	-
5	902255	Bolt M20 x 75	4
6	900785	Nut M20 Self Locking	4
7	900431	Grease Nipple ¼" UNF	1

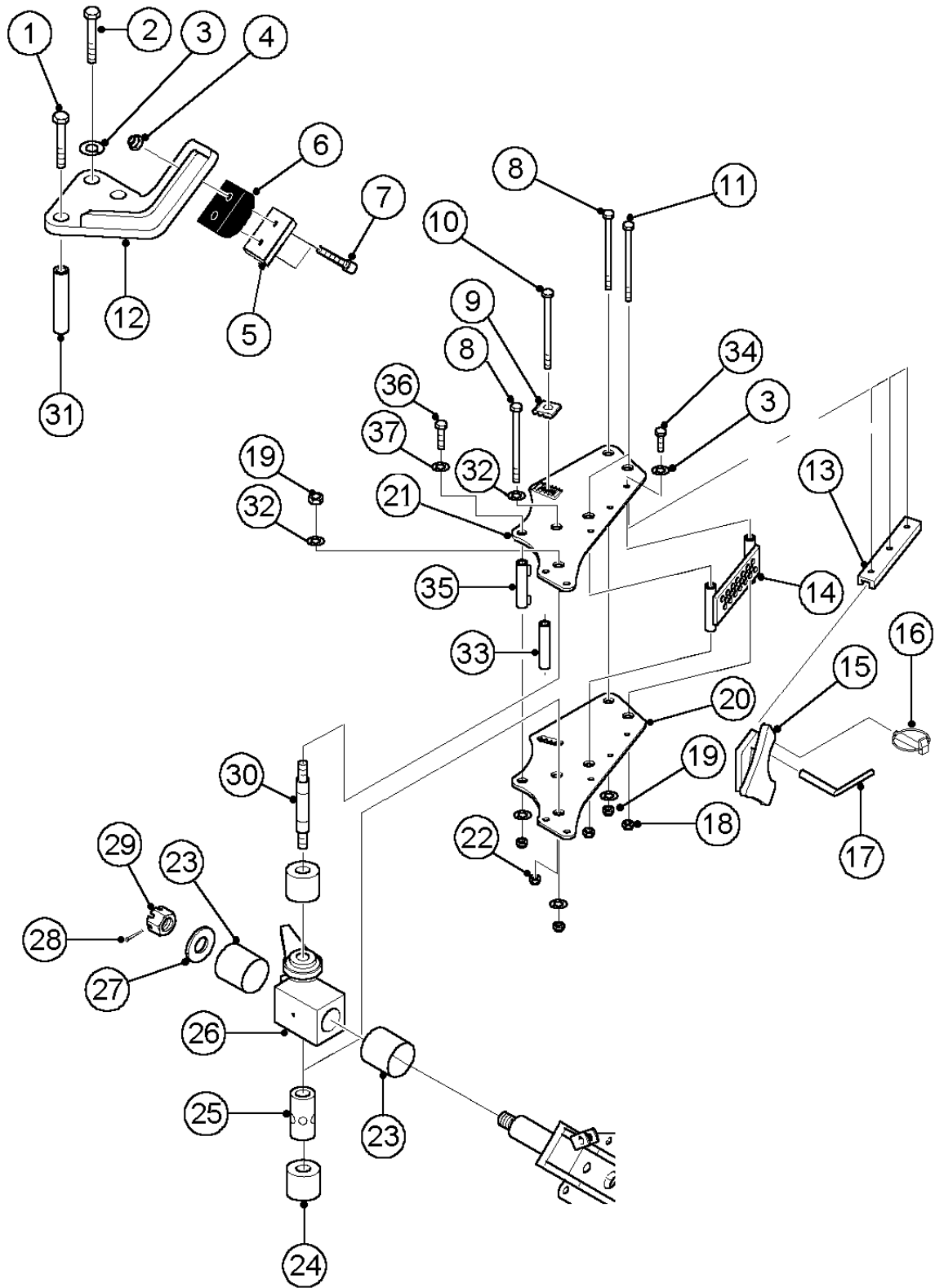
# **MR LEG BRACKET ASSEMBLY**



# **MR LEG BRACKET ASSEMBLY**

ITEM	PART N°	DESCRIPTION	QTY
1	-	Shearbolt See Separate Page	-
2	900496	Plain Nut 5/8" UNC	2
3	900117	Self Locking Nut 3/4" UNF	6
4	900197	Spring Washer 3/4"	6
5	120200	Reset Pivot Ball	6
6	900431	Grease Nipple 1/4" UNF	1
7	1057900	Eye	1
8	900467	Extension Spring	1
9	175600	Turnbuckle Eye LH	1
10	175800	Turnbuckle	1
11	900496	Nut 5/8" UNC	1
12	175700	Turnbuckle	1
13	900282	Spring Pin 5/16" x 1 1/2"	1
14	1062900	Pin	1
15	900371	Internal Tension Bush	2
16	1057200	Cast Hook	1
17	1193500	Pin	1
18	1057400	Reset Leg Bracket	1
19	900052	Bolt 3/4" UNF x 2 3/4"	2
20	900551	Spring Pin 8 x 40	1
21	1226200	Tension Rod	1
22	1226100	Rod End	1
23	900434	Grease Nipple 1/4" UNF	1
24	900107	Plain Nut 3/4" UNF	2
25	900022	Bolt 3/8" UNF x 3/4"	1
26	131500	Pin	1
27	903136	Bolt M24 x 260	1
28	901610	Plain Washer M24	2
29	900786	Self Locking Nut M24	1
30	903137	Bolt M20 x 295	1
31	1022700	Serrated Washer	2
32	120100	Pivot Cup Short (Outside)	1
33	134200	Pivot Cup Long (Inside)	1
34	900785	Self Locking Nut M20	1
35	1513100	Reset Leg Bracket	1
36	900197	Spring Washer 3/4"	2
37	900111	Self Locking Nut 3/4" UNF	2

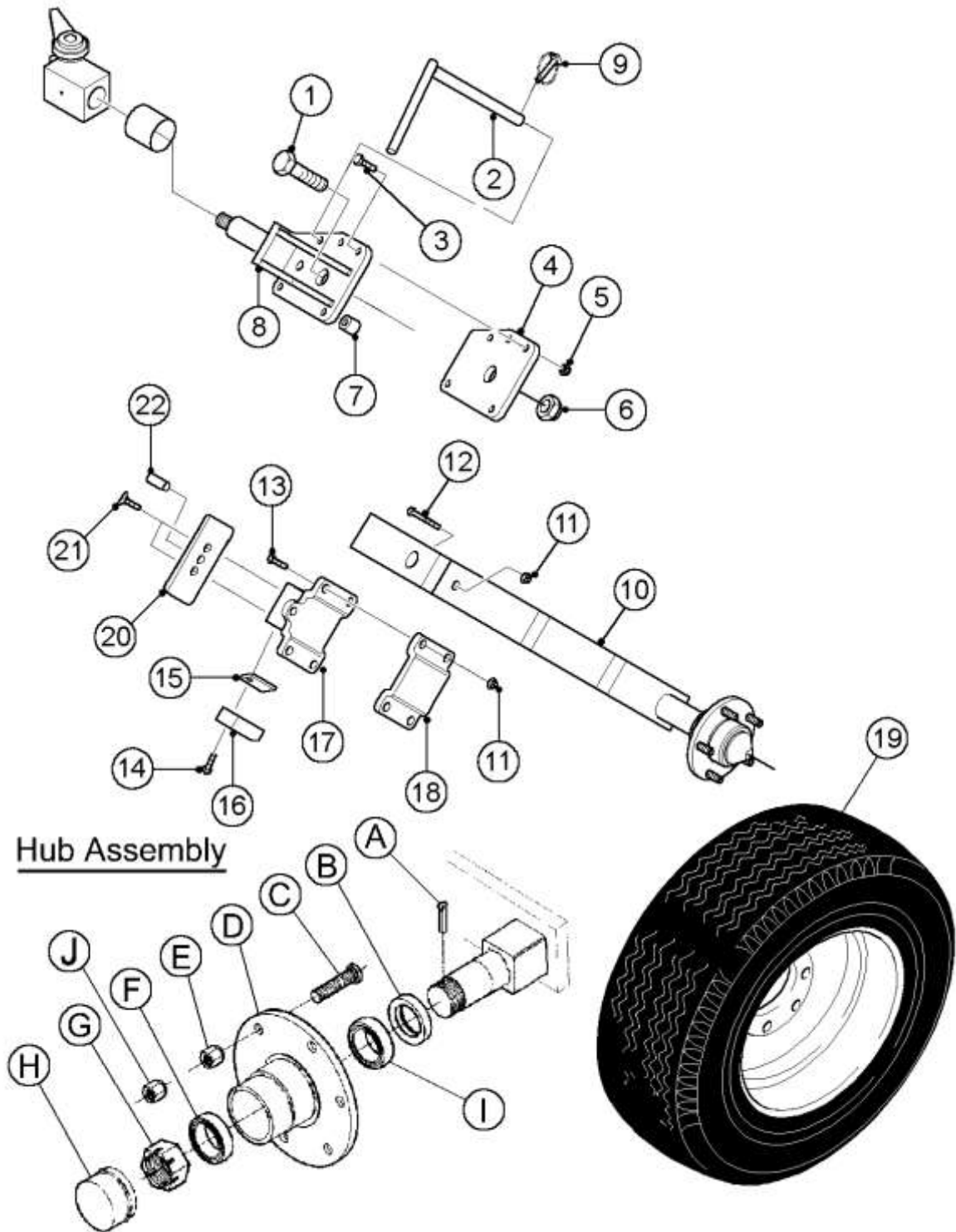
# **WHEEL BRACKET ASSEMBLY**



# **WHEEL BRACKET ASSEMBLY**

ITEM	PART N°	DESCRIPTION	QTY
1	901104	Bolt M16 x 280	1
2	901330	Set Screw M16 x 35	4
3	901191	Spring Washer M16	10
4	900783	Self Locking Nut M12	4
5	1496600	Bump Stop Plate	2
6	1496700	Rubber Stop	8
7	901506	C'sunk Square Bolt M12 x 70	4
8	903136	Bolt M24 x 260	3
9	1022700	Serrated Width Adjuster	2
10	903137	Bolt M20 x 295	1
11	903138	Bolt M16 x 250	2
12	1489499	Wheel Bump Stop (LH)	1
-	1489498	Wheel Bump Stop (RH)	1
13	1483500	Adjuster Slide Rail	2
14	1483600	Adjuster Locator	1
15	1483300	Depth Adjuster	1
16	900527	Linch Pin	1
17	1484300	Depth Locator Pin	1
18	900784	Self Locking Nut M16	3
19	900786	Self Locking Nut M24	5
20	1483198	Wheel Mounting (RH)	1
21	1483199	Wheel Mounting (LH)	1
22	900785	Self Locking Nut M20	1
23	903151	Plain Metal Bearing	2
24	900389	Plain Metal Bearing	2
25	1484000	Wheel Swivel Spacer	1
26	1476900	Wheel Swivel	1
27	1498300	Special Washer	1
28	901917	Split Cotter Pin	1
29	901556	Hexagonal Slotted Nut M24	1
30	1483400	Wheel Swivel Pin	1
31	1489600	Bump Stop Support	1
32	901610	Plain Washer M24	8
33	1484100	Swivel Limit	1
34	901329	Set Screw M16 x 30	6
35	1556000	Adjustable Swivel Limit	1
36	901357	Set Screw M24 x 50	2
37	901195	Spring Washer M24	2

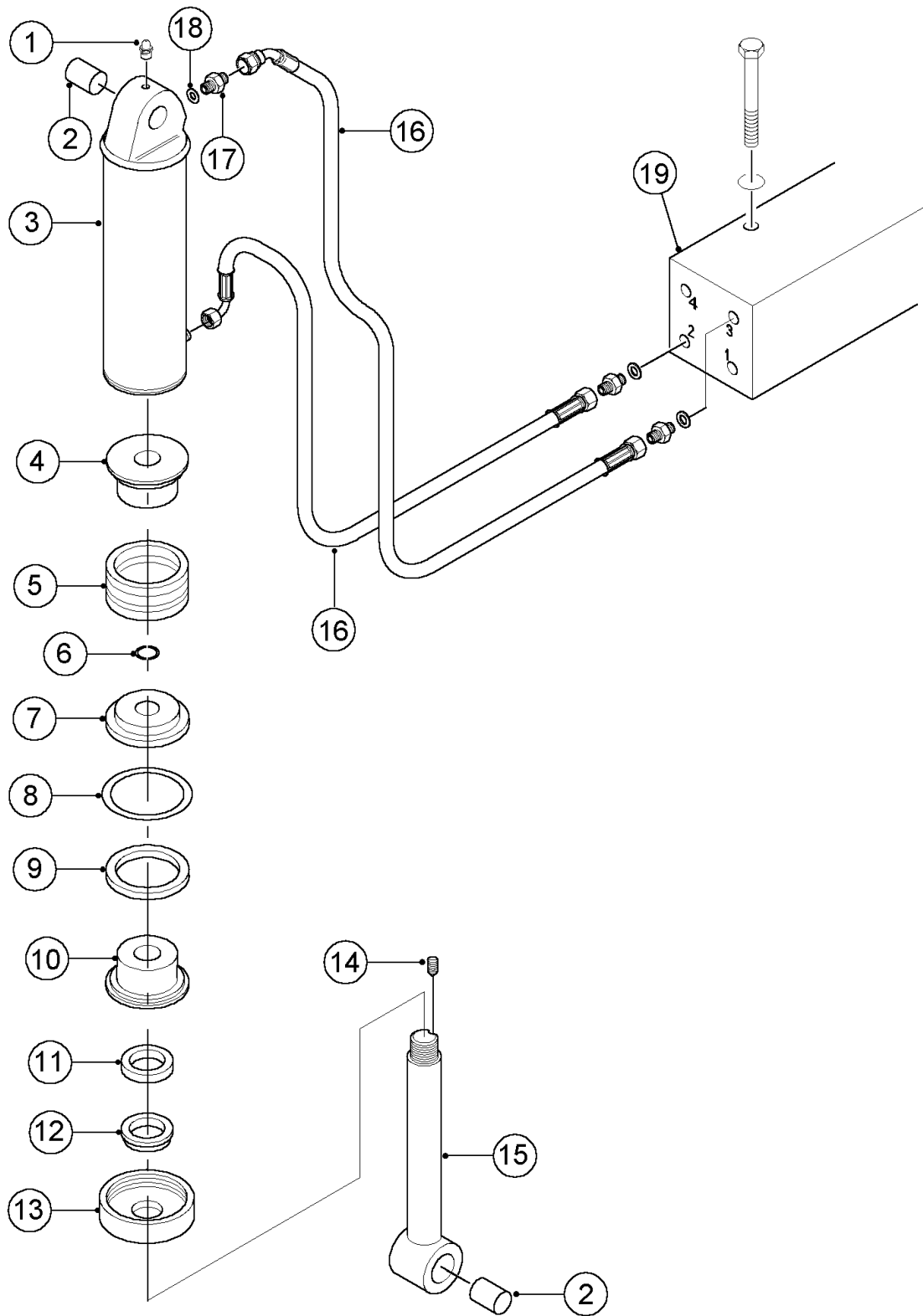
# WHEEL ARM ASSEMBLY



# **WHEEL ARM ASSEMBLY**

ITEM	PART N°	DESCRIPTION	QTY
1	901141	Bolt M24 x 90	1
2	1484200	Wheel Transport Pin	1
3	901089	Bolt M16 x 90	3
4	1484800	Wheel Arm Clevis Plate	1
5	900784	Self Locking Nut M16	3
6	900786	Self Locking Nut M24	1
7	1484900	Clevis Spacer Boss	3
8	1483200	Wheel Pivot	2
9	900528	Linch Pin	1
10	1483000	Wheel Arm	1
11	900783	Self Locking Nut M12	5
12	901070	Bolt M12 x 60	1
13	901067	Bolt M12 x 45	4
14	903453	Socket Cap Screw M10 x 35	2
15	1485600	Depth Equalizing Strip	2
16	1483700	Depth Striker	2
17	1483800	Depth Striker Mounting (Suits 10/75)	1
17a	1534100	Depth Striker Mounting (Suits 12/80 & 11.5/80)	
18	1483900	Depth Striker Clamp	1
19	1319000	Wheel Assembly 10/75 – 15.3 (Std)	1
19a	1426400	Wheel Assembly 12/80 – 15.3	-
19c	1566000	Wheel Assembly 11.5/80 – 15.3	-
20	1517900	Keep Plate (Suits 10/75)	1
20a	1518100	Keep Plate (Suits 12/80 & 11.5/80)	
21	901199	Countersunk Socket Screw M12 x 35	2
22	1520600	Dowel Pin	1
A	901214	Spit Pin	1
B	1497200	Dirt Seal	1
C	1497400	Wheel Stud M16 x 1.5	5
D	1497300	Wheel Hub	1
E	1497500	Wheel Nut M16 x 1.5	5
F	1497600	Tapered Roller Bearing (small)	1
G	1497700	Slotted Nut	1
H	1497800	Hub Cap	1
I	232100	Tapered Roller Bearing (Large)	1
J	903274	Self Locking Nut M16	5

# **TURNOVER HYDRAULICS**





# **TURNOVER HYDRAULICS**

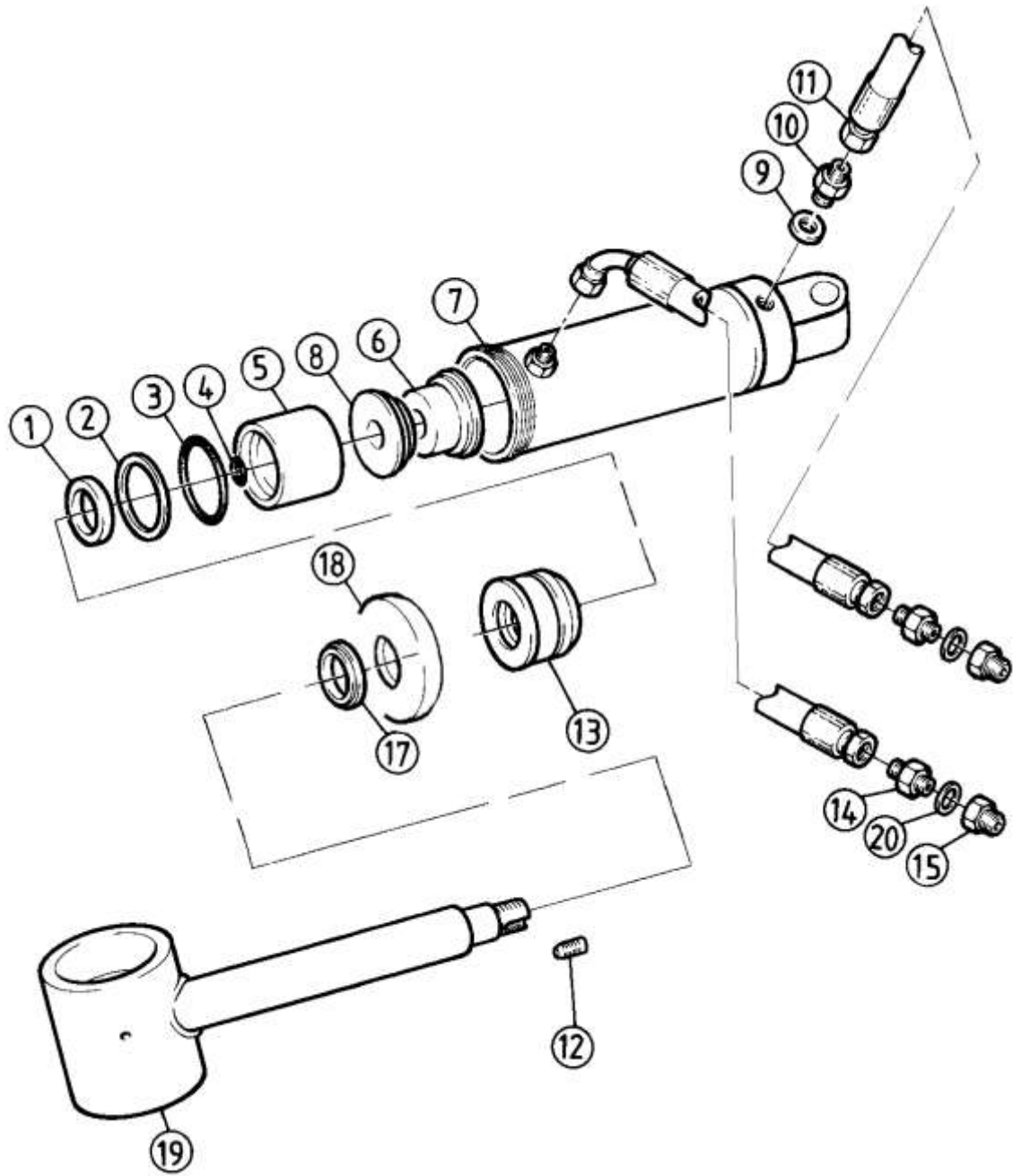
ITEM	PART N°	DESCRIPTION	QTY
1	900431	Grease Nipple ¼” UNF Straight	2
2	900373	Plain Metal Bearing	2
3	1557500	Cylinder Assembly	1
4	1579100	Piston (SPS Type)	1
5	900253	Double Acting Seal (SPS)	1
6	900202	‘O’ Ring	1
7	900806	Back-up Ring	1
8	900204	‘O’	1
9	900800	Back-up Ring	1
10	1519000	End Plug	1
11	900221	Single Acting Seal	1
12	900261	Wiper Seal	1
13	1518900	End Cap	1
14	900151	Socket Set Screw ¼” UNF	1
15	1557600	Piston Rod	1
16	043000	Hydraulic Hose Assembly	2
17	900391	Adapter 3/8” BSP	1
18	900301	Dowty Washer 3/8” BSP	1
19		Sequence Valve (See Separate Page)	-
-	1579500	Ram Assembly	
-	1579700	Seal Kit	



# **SEQUENCING HYDRAULICS**

ITEM	PART N°	DESCRIPTION	QTY
1	1463500	Cylinder Assembly	1
2	1463400	Floating Piston	1
3	900250	Double Acting Seal	1
4	1518400	Piston	1
5	900251	Double Acting Seal	1
6	900216	'O' Ring	1
7	903341	Back-Up ring	1
8	1518500	Annulus	1
9	900206	'O' Ring	1
10	900803	Back-Up Ring	1
11	1463000	End Plug	1
12	900224	Single Acting Seal	1
13	1463100	End Cap	1
14	900267	Wiper Seal	1
15	900151	Socket Set Screw ¼" UNF	1
16	1463600	Piston Rod	1
17	1491800	Hydraulic Hose Assembly	1
18	1484700	Check/ Relief Valve	1
19	1492400	Hydraulic Hose Assembly	2
20	1492500	Hydraulic Hose Assembly	2
21	900984	Adapter 3/8" – 1/8" BSP	1
22	900391	Adapter 3/8" BSP	14
23	900301	Dowty Washer 3/8" BSP	14
24	1484600	Sequence Valve	1
25	902482	Plain Washer M8	1
26	901034	Bolt M8 x 110	1
27	008400	Hydraulic Hose Assembly	2
28	900392	Adapter 3/8"- ½" BSP	4
29	900302	Dowty Washer ½" BSP	4
30	900611	Tractor Quick Coupler	4
31	1492600	Hydraulic Hose Assembly	2
32	900741	Breather	1
33	902484	Plain Washer M8	2
34	901031	Bolt M8 x 80	2
35	900781	Self Locking Nut M8 (Not Shown)	1
-	1463300	Ram Assembly	-
-	1519400	Seal Kit	-

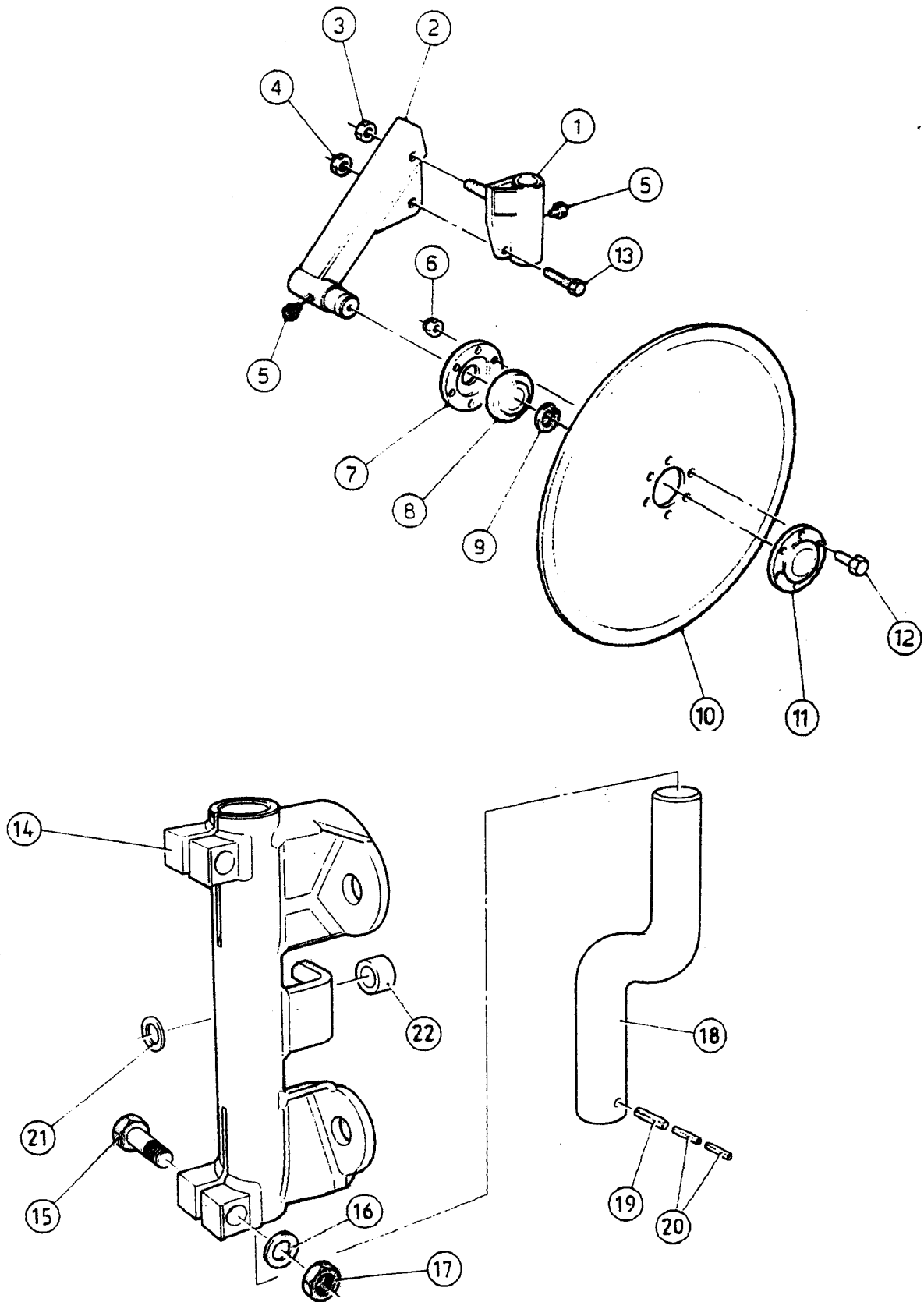
# **OFFSET HYDRAULICS**



# **OFFSET HYDRAULICS**

ITEM	PART N°	DESCRIPTION	QTY
1	900224	Single Acting Seal	1
2	900800	Back-up Ring	1
3	900204	'O' Ring	1
4	900216	'O' Ring	1
5	903341	Back-up Ring	1
6	900242	Double Acting Seal	1
7	1464100	Piston Annulus	1
8	1464000	Piston Half	1
9	1485200	Cylinder Assembly	1
10	900391	Male- Male Adapter 3/8"- 3/8" BSP	1
11	1463100	Hydraulic Hose Assembly	2
12	900151	Socket Setscrew 1/4" UNF	1
13	1485400	End Plug	1
14	900392	Male- Male Adapter 3/8"- 1/2" BSP	2
15	900611	Tractor Quick Coupler	2
16	900301	Dowty Washer 3/8" BSP	1
17	900264	Wiper Seal	1
18	1464300	Screwed cap	1
19	1485300	Piston Rod	1
20	900302	Dowty Washer 1/2" BSP	2
-	1485100	Ram Assembly	-
-	1493200	Ram Seal Kit	-

# **DISC ASSEMBLY**

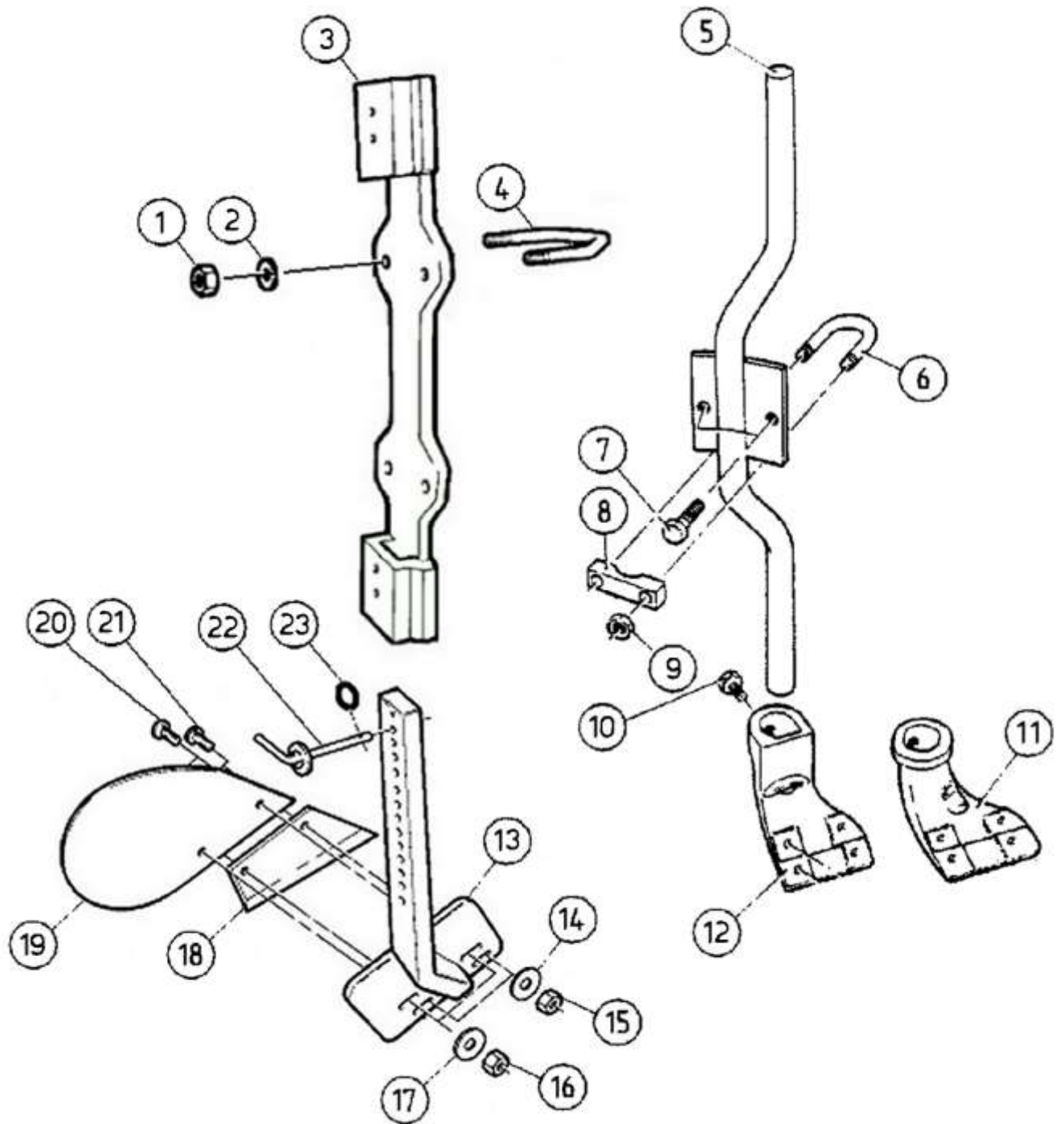


# **DISC ASSEMBLY**

ITEM	PART N°	DESCRIPTION	QTY
1	305698	Disc Arm Swivel R.H	1
-	305699	Disc Arm Swivel L.H	1
2	052998	Disc Arm 18" R.H.	As Req.
-	052999	Disc Arm 18" L.H.	As Req.
3	900107	Plain Nut 3/4" UNF	1
4	900105	Plain Nut 1/2" UNF	1
5	900431	Grease Nipple 1/4" UNF	2
6	900781	Self Locking M8	6
7	055000	Bearing Housing (Inner)	1
8	900324	Ball bearing	1
9	900601	Circlip	1
10	052800	Disc 18" Plain	As Req
-	053000	Disc 20" Plain	As Req
-	063800	Disc 18" Cutaway	As Req
-	054100	Disc 20" Cutaway	As Req
11	054900	Bearing Housing (Outer)	1
12	901263	M 8 x 30mm Set	6
13	900483	Shearbolt	1
14	138000	Disc Bracket	1
15	900043	Bolt 5/16" UNF x 2 1/2"	2
15a		Bolt (For fitting Disc Bracket)	
16	900172	Plain Washer 5/8"	2
17	900106	Nut 5/8" UNF	2
18	137900	Stalk	1
19	900542	Spring Pin 10 x 60	2
20	900541	Spring Pin 6 x 30	4
21	900178	Plain Washer 3/4" x 0.128	1
22	178200	Spacer	3

Quantities are per hand

# **SKIM ASSEMBLY**



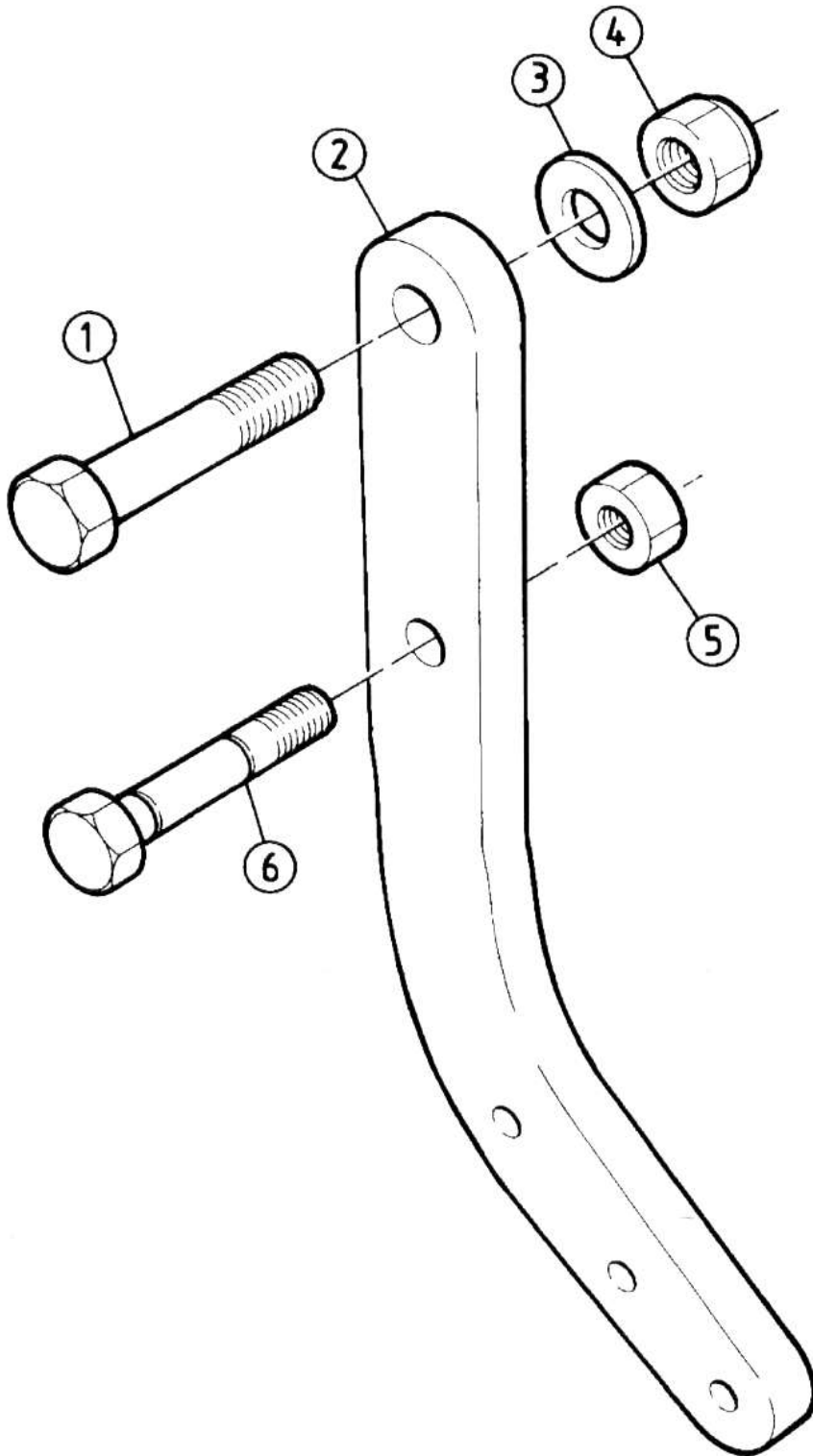


# **SKIM ASSEMBLY**

ITEM	PART N°	DESCRIPTION	QTY
1	900774	Plain Nut M16 (Rect Only)	4
2	901606	Plain Washer M16 (Rect Only)	4
3	1439200	Mounting Bracket (Rect Only)	1
4	1344000	'V' Bolt (Rect Only)	2
5	1086100	Round Skim Shank	1
6	010700	'U' Bolt (Rect)	2
7	900996	Setscrew 5/8" UNC x 2 1/2" (Round Only)	2
8	010800	Clamp Block (Round Only)	2
9	900496	Plain Nut 5/8" UNC (Round Only)	2
10	062700	Knurl Bolt (Round Only)	4
11	191398	'J' Type Skim Frog RH (Round Only)	As Req
-	191399	'J' Type Skim Frog LH (Round Only)	As Req
12	048298	'K' Type Skim Frog RH (Round Only)	As Req
-	048299	'K' Type Skim Frog LH (Round Only)	As Req
13	1439398	Rect Skim Shank RH (Rect Only)	1
-	1439399	Rect Skim Shank LH (Rect Only)	1
14	902955	Special Washer (Rect Only)	4
15	900498	Plain Nut 3/8" UNC	2
16	900103	Plain Nut 3/8" UNF	2
17	-	See Item 14	-
18	048098	Skim Point RH	1
-	048099	Skim Point LH	1
19	1099898	XL Skim Wing RH	1
-	1099899	XL Skim Wing LH	1
20	900141	C'Sunk Bolt 3/8" UNF x 28mm	4
21	900810	Taper Bolt 3/8" UNC x 25mm	4
22	1344100	Locating Pin (Rect Only)	2
23	903200	Spring Coil (Rect Only)	2

All Quantities are per furrow

# **145 SERIES MR LEG**



# **145 SERIES MR LEG**

ITEM	PART N°	DESCRIPTION	QTY
1	900052	Bolt 3/4" UNF x 2.75"	1
2	-	See Table Below	As Req
3	-	Not Required	-
4	900107	Plain Nut 3/4" UNF	1
5	900496	Plain Nut 5/8" UNC	1
6	-	Shearbolt (See Separate Page)	-

## **LEG LIST**

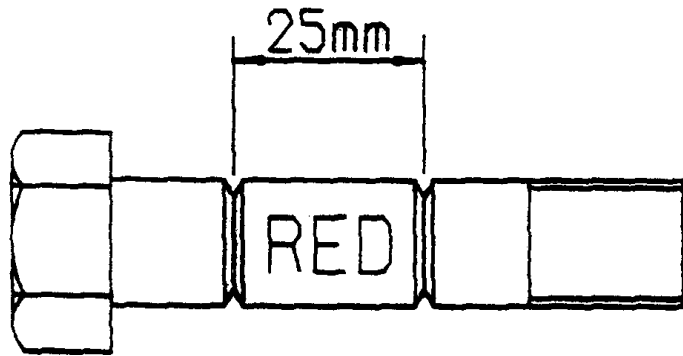
Underbeam Clearance (Inches)	Body Type	Part N°
27	DD	183800
27	UCN	183800
27	M-SLAT	1348300

# **145 SERIES MR LEG SHEARBOLT**

To avoid SERIOUS DAMAGE it is essential that the correct shear bolts are fitted.

THE USE OF INCORRECT SHEARBOLTS WILL NULLIFY  
YOUR WARRANTY!

To ease identification, all leg shearbolts are colour coded.



Part Number – 900486