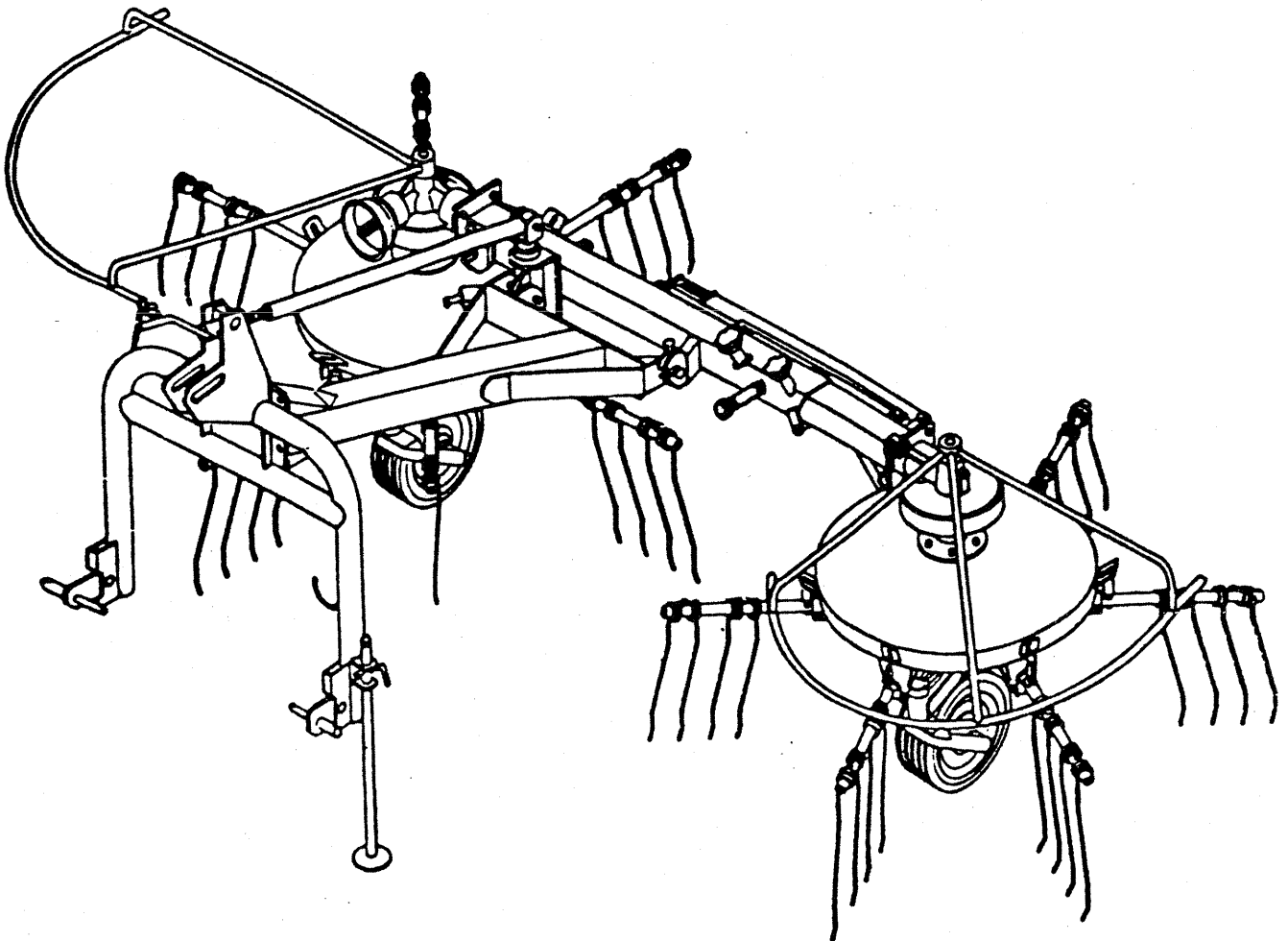


AGRICULTURAL MACHINERY

sitrex®

**USE AND MAINTENANCE
SPARE PARTS LIST**



UNIVERSAL U/400

Warrantee

On delivery, check that the machine has not been damaged during transport and that all the attachments are present. Claims must be made in writing to the agent within 8 days of receipt.

The manufacturer warrants new machinery at the time of delivery to the original purchaser to be free from defects in material and workmanship if properly set up and operated in accordance with this Operator's Manual.

The manufacturer undertakes to repair or replace free of charge any defective part which should be returned by the purchaser (freight prepaid) and found to be defective by inspection authorized by the manufacturer during the warranty period.

This warranty will be valid for 12 (twelve) months from the delivery of goods to the original purchaser.

In case the customer is not in a position to return the defective part to the manufacturer, the manufacturer cannot be held responsible for any cost due for repair or replacement of any part of the machine, he will only supply the part(s) required for the repair and/or replacement.

The warranty is null and void when it is evident that the machine has been improperly used or repaired or however repaired without authorization.

The manufacturer undertakes no responsibility for any obligation or agreement reached by any employers, agents or dealers, which are not in compliance with the above warranty. The manufacturer cannot be held responsible for the consequent damages. This warranty substitutes any other warranty, express or implied, and any other manufacturer's obligation.

SPECIFICATIONS

Working width for raking and turning	10'-6" to 11'-6"	3.20 - 3.50 m
Working width for windrowing	10'-2" to 13'-2"	3.10 - 4.00 m
Max. Working Speed	9 MPA	14 km/h
HP/Kw required	18.5 Kw	25 HP
P.T.O.'s R.p.m.		540
Tine arm each rotor		6
Transport width	7'-5"	2.25 m
Weight	925 Lbs.	420 kgs
Tire		15X6.00 6PR

MAINTENANCE

LUBRICATION: 1 - TIE-ROD FOR 3RD POINT SETTING
 2 - GEARBOXES
 3 - CAM
 4 - P.T.O. SHAFT'S CROSS

TIRE PRESSURE: 3.5 ATM - 45 P.S.I.

IMPORTANT: BEFORE USING YOU SHOULD CHECK THAT ALL NUTS ARE WELL TIGHTENED. MAINTENANCE AND REPLACEMENT OF PARTS SHOULD BE ALWAYS CARRIED OUT WITH MACHINE OFF.

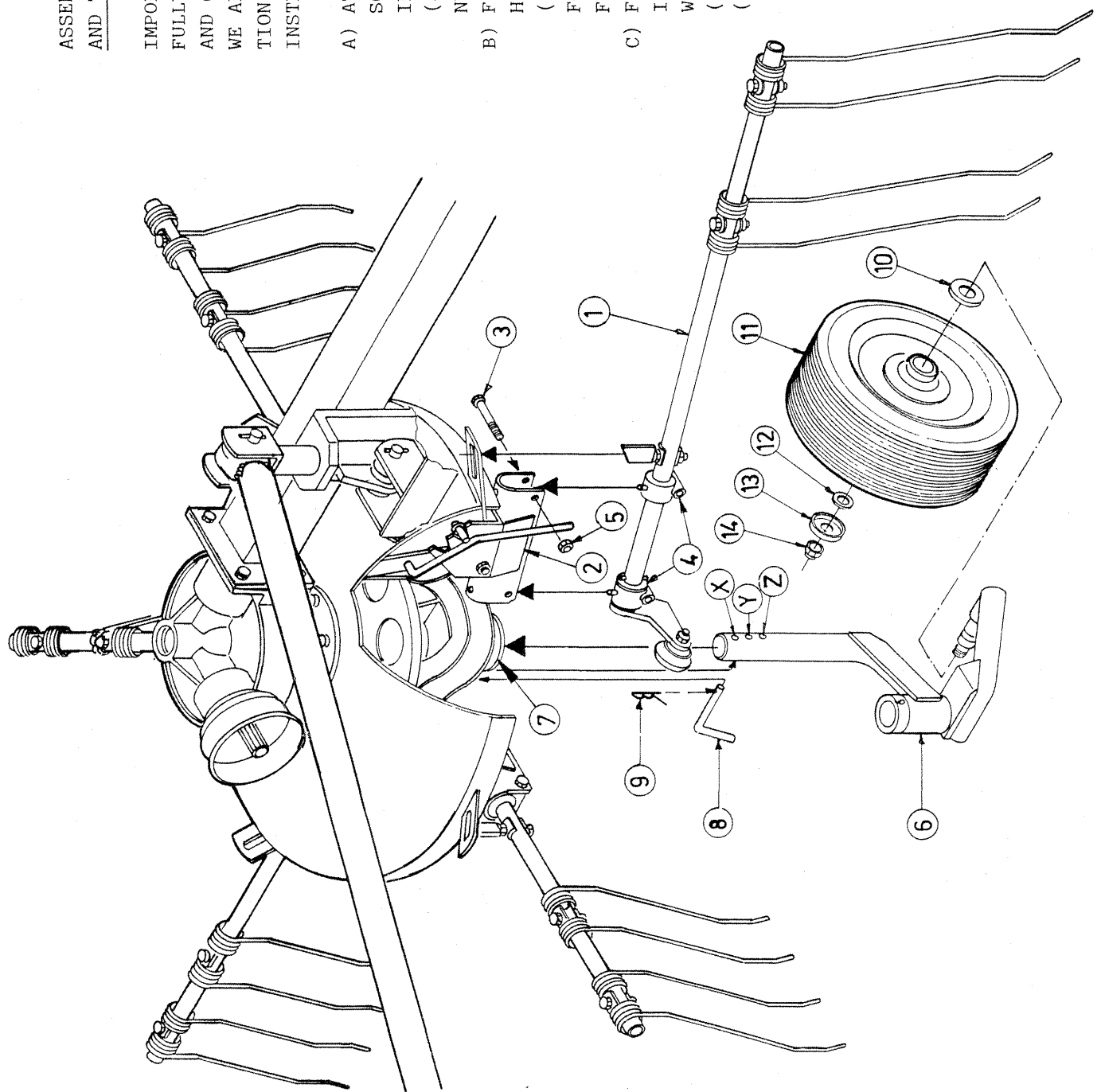
CAUTION FOR USE

It could be dangerous for people who are not familiar with this type of machine to use the rake, particularly when kids are there during the assembly or operation on field. We therefore recommend the use of the rake only to those people who are very familiar with the machine and the safety precautions.

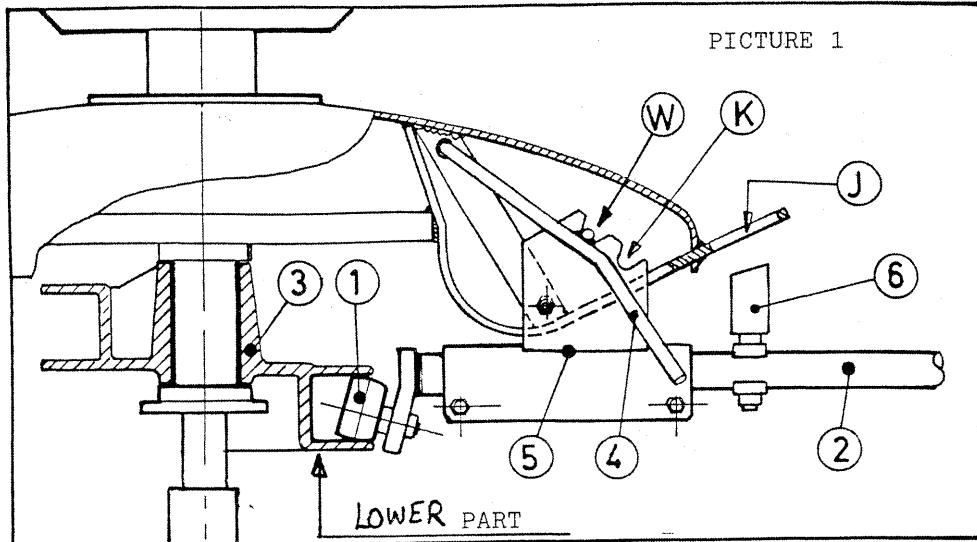
ASSEMBLY OF TINE ARMS, TIRE SUPPORT ASSY
AND TIRES

IMPORTANT: TINE ARMS (1) WILL BE SUPPLIED FULLY ASSEMBLED IN QUANTITY OF 6 R.H. PCS. AND 6 L.H. PCS. WE ARE GIVING YOU BELOW THE ASSEMBLY INSTRUCTION OF R.H. ARMS. HOWEVER, THE SAME INSTRUCTIONS APPLY TO THE L.H. ARMS.

- A) ATTACH ARM (1) TO MOBILE SUPPORT (2) WITH SCREW (3). SCREW (3) MUST BE FITTED FIRST INTO MOBILE SUPPORT (2), THEN INTO SUPPORTS (4) OF ARM (1), AND FINALLY TIGHTENED WITH NUT (5).
- B) FIT TIRE SUPPORT ASSY (6) INTO SEAT OF HOLLOW PIN (7) AND LOCK WITH ACCESSORIES (8-9) IN ONE OF THE THREE POSITIONS: X-Y-Z. FOR THE POSITION TO BE CHOSEN PLS REFER TO FOLLOWING PAGES.
- C) FIT INNER DUST COVER (10) (WITH LARGE HOLE) INTO SEAT AS SHOWN, THEN FIT TIRE (11), WASHER (12), AND OUTER DUST COVER (13) (WITH SMALL HOLE). NEXT, LOCK ALL WITH NUT (14).

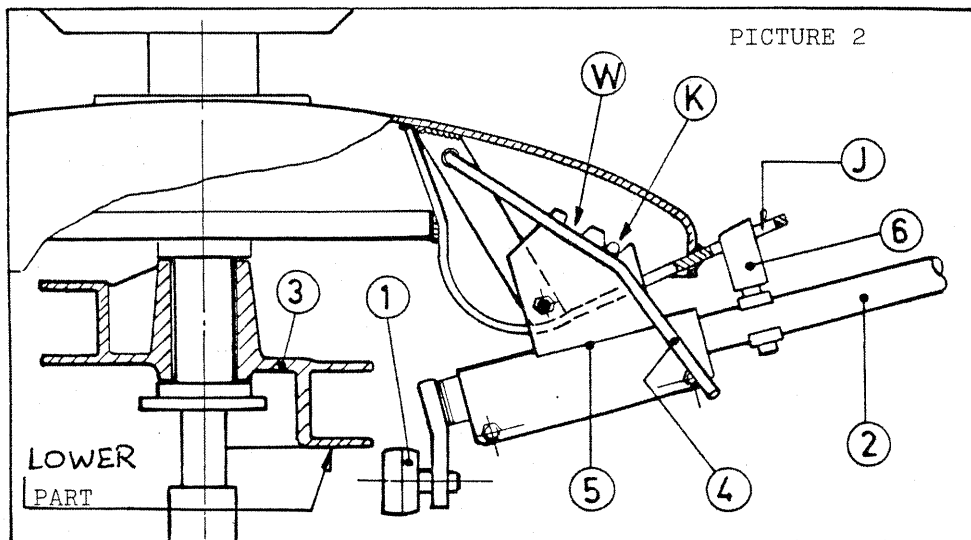


SETTING OF TINE ARMS FOR VARIOUS WORKING POSITIONS



1) PLS SEE PICT. 1 - WHEEL (1) ATTACHED TO ARM (2) IS FITTED INSIDE SLOT OF CAM (3). TO GET IT INTO CAM SLOT, FIT PIN WELDED TO LEVER (4) INTO SEAT (W) OF MOBILE SUPPORT (5). IN THIS POSITION THE ARM IS PARALLEL TO THE GROUND. THIS POSITION IS FOR RAKING. (IT IS ALSO USED FOR SPREADING OR TURNING DELICATE CROPS). WITH THE ARMS (2) IN THIS POSITION YOU SHOULD SET THE MACHINE AS PER PICTURE 3.

IMPORTANT: THE WHEEL (1) SHOULD BE FITTED INTO OR REMOVED FROM THE SLOT ALWAYS AT THE LOWER PART OF THE CAM.

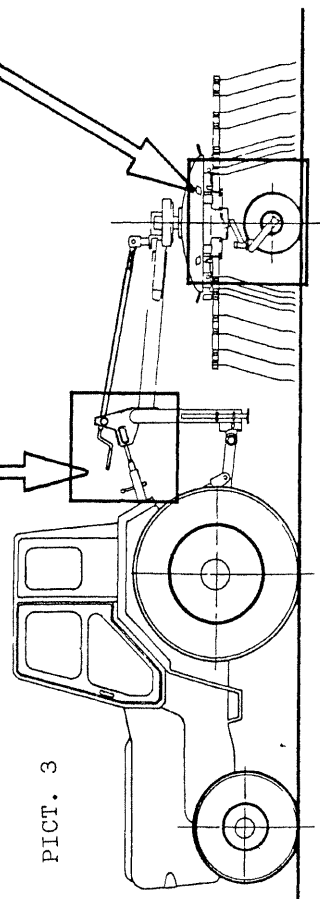
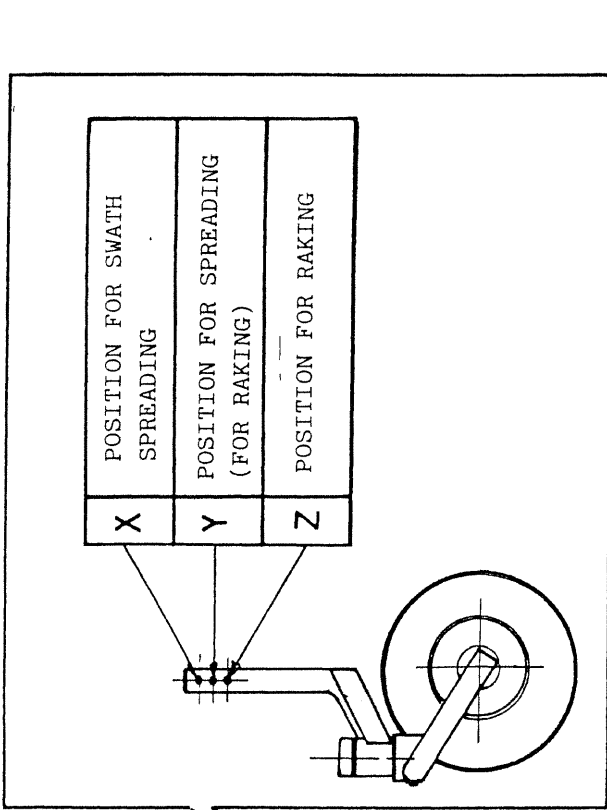


2) PLS SEE PICT. 2 - WHEEL (1) ATTACHED TO ARM (2) IS POSITIONED OUTSIDE THE SLOT OF CAM (3). TO GET IT OUTSIDE THE SLOT, FIT PIN WELDED TO LEVER (4) INTO SEAT (K) OF MOBILE SUPPORT (5). IN THIS POSITION THE ARM IS INCLINED TO THE GROUND AND THE COUPLING (6) IS FITTED INTO SEAT (J). THIS POSITION IS FOR SPREADING OR TURNING. WITH THE ARMS (2) IN THIS POSITION YOU SHOULD SET THE MACHINE AS PER PICTURE 3.

USE OF THE MACHINE ON FIELD

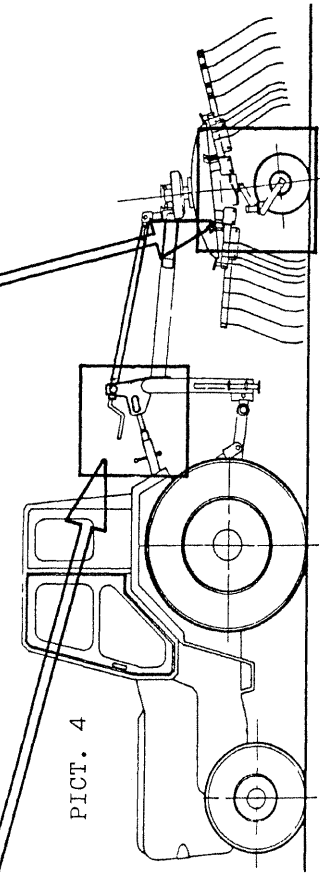
WE ARE GIVING YOU BELOW GENERAL INFORMATION ABOUT THE USE OF THE MACHINE ON FIELD. THE OPERATOR WILL THEN DECIDE FROM TIME TO TIME ACCORDING TO THE TERRAIN AND HAY CONDITIONS HOW TO SET THE MACHINE.

THE INCLINATION OF THE MACHINE TO THE GROUND CAN BE SET WITH THE HANDLE. ADDITIONAL SETTING CAN BE MADE WITH THE ADJUSTABLE ARM OF TRACTOR'S 3RD POINT.



PICT. 3

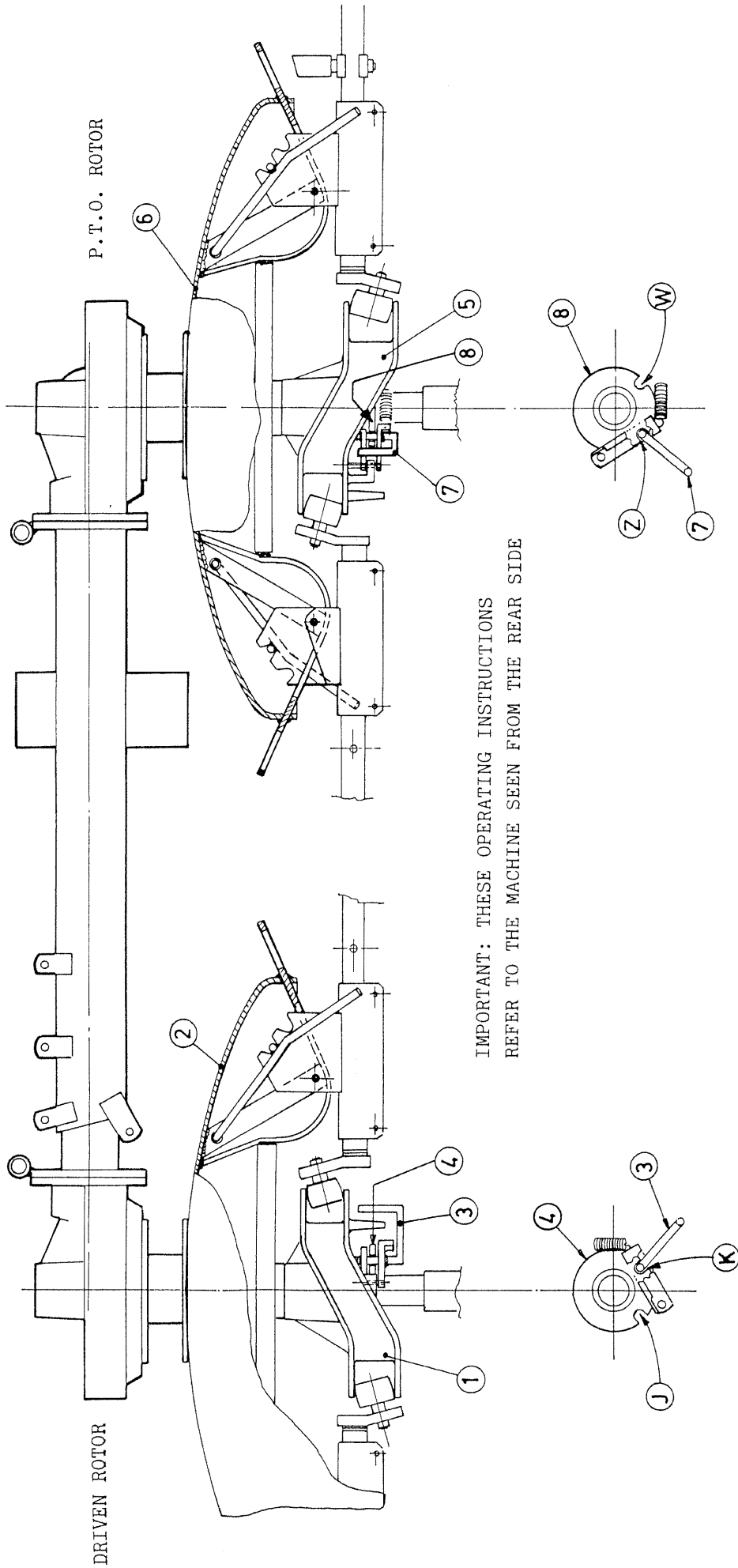
RAKING POSITION (OR FOR SPREADING OF DELICATE FORAGE)
 SET THE MACHINE WITH THE ROTORS PARALLEL TO THE GROUND OR SLIGHTLY INCLINED FORWARD.
 SET THE TINE ARMS WITH THE WHEEL INSIDE THE HOUSING - SEE NOTES AND PICT. 1
 SET WHEEL ASSY ON Z OR Y
 FOR CAM POSITIONING PLS SEE NOTES AND PICT. OF PAGE 6



PICT. 4

SPREADING AND TURNING POSITION.
 SET THE MACHINE WITH THE ROTORS INCLINED FORWARD UNTIL THE FRONT TINES SKIM THE GROUND.
 SET THE TINE ARMS WITH THE WHEEL OUTER THE CAM HOUSING - SEE NOTES AND PICT. 2.
 SET WHEEL ASSY ON Y OR X.
 FOR CAM POSITIONING PLS SEE NOTES AND PICT. OF PAGE 7

CAM POSITIONING FOR RAKING

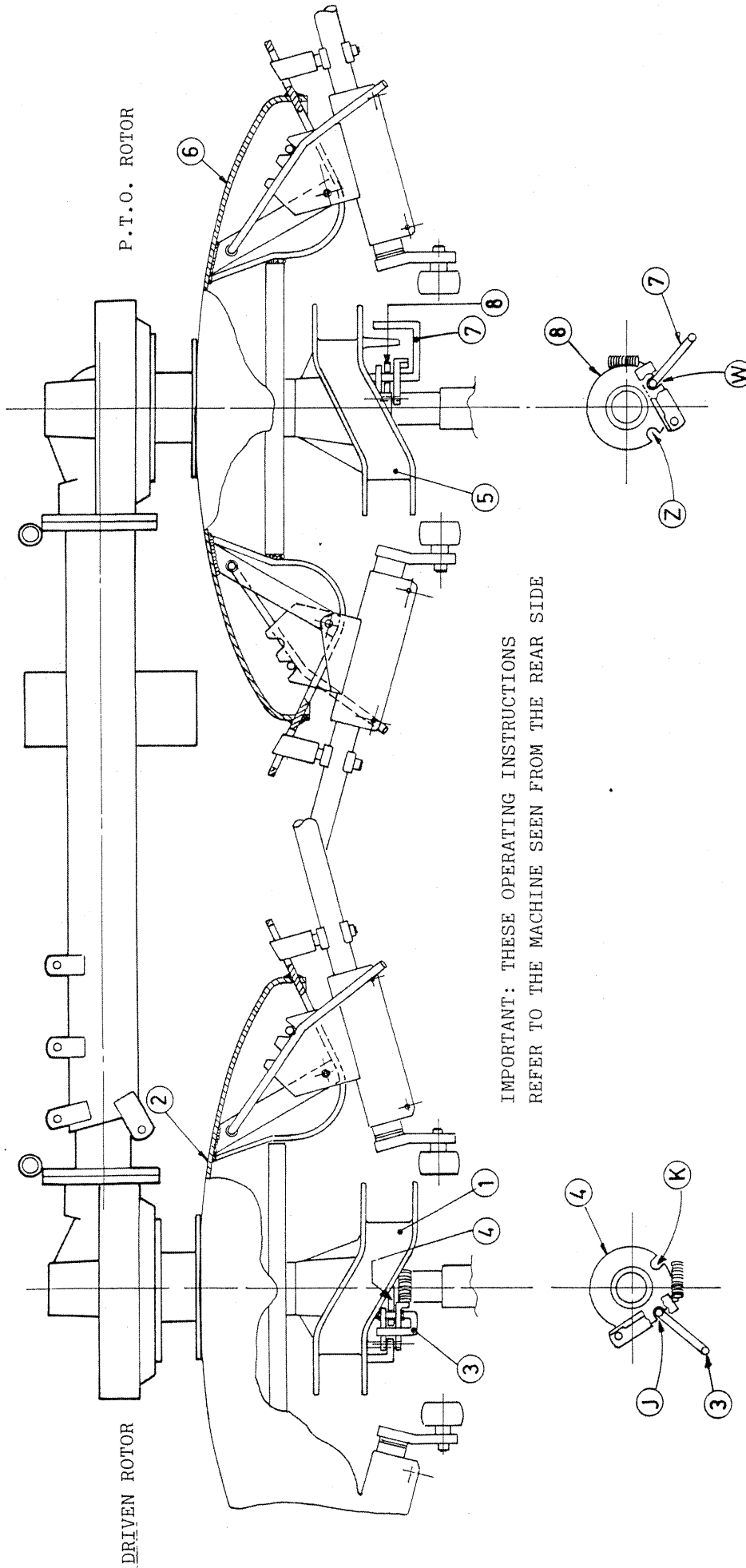


IMPORTANT: THESE OPERATING INSTRUCTIONS REFER TO THE MACHINE SEEN FROM THE REAR SIDE

FOR RAKING: CAM (1) OF THE DRIVEN ROTOR (2) SHOULD HAVE THE LOWER PART TO THE OUTSIDE OF THE MACHINE. TO GET THIS POSITION, LOCK LEVER (3) ON SLOT (K) OF PIN FLANGE (4).

FOR RAKING: CAM (5) OF P.T.O. ROTOR (6) SHOULD HAVE THE LOWER PART TO THE OUTSIDE OF THE MACHINE. TO GET THIS POSITION, LOCK LEVER (7) ON SLOT (Z) OF PIN FLANGE (8).

CAM POSITIONING FOR SPREADING AND TURNING



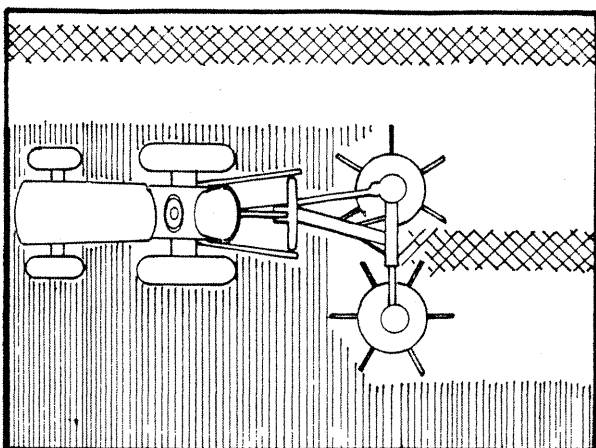
IMPORTANT: THESE OPERATING INSTRUCTIONS REFER TO THE MACHINE SEEN FROM THE REAR SIDE

FOR SPREADING AND TURNING: CAM (1) OF DRIVEN ROTOR (2) SHOULD HAVE THE UPPER PART TO THE OUTSIDE OF THE MACHINE. TO GET THIS POSITION, LOCK LEVER (3) ON SLOT (J) OF PIN FLANGE (4).

FOR SPREADING AND TURNING: CAM (5) OF P.T.O. ROTOR (6) SHOULD HAVE THE UPPER PART TO THE OUTSIDE OF THE MACHINE. TO GET THIS POSITION, LOCK LEVER (7) ON SLOT (W) OF PIN FLANGE (8).

WE ARE GIVING BELOW SOME SUGGESTIONS ON MACHINE SETTING FOR VARIOUS WORKING OPERATIONS. HOWEVER, FOR BEST PERFORMANCE, THE OPERATOR SHOULD SET THE MACHINE ACCORDING TO HIS EXPERIENCE AS PER GROUND CONDITIONS AND CROP.

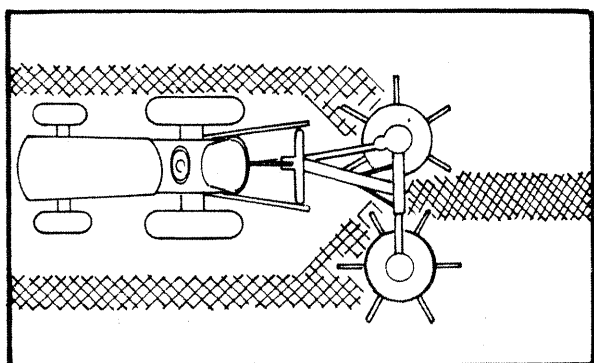
PICT. 5



RAKING (PICT. 5)

- A - BRING IT TO MAXIMUM WORKING WIDTH OR ABOUT
- B - FIT THE WHEELS OF TINE ARMS INTO CAM SLOT
- C - BRING THE ROTORS PARALLEL TO THE GROUND OR SLIGHTLY INCLINED FORWARD
- D - POSITION THE CAMS AS PER PAGE 6
- E - 350-450 P.T.O.'s R.p.m.
- F - 7 TO 12 KM/HR (4.5 TO 7.5 MILES/HR) FORWARD SPEED

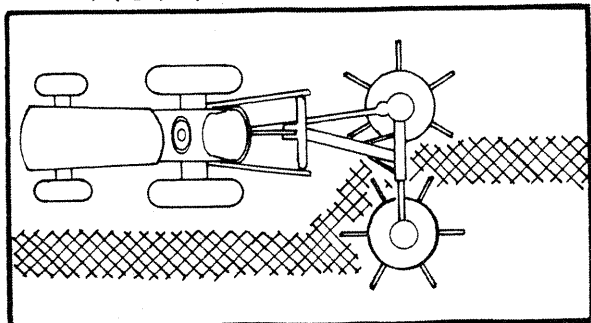
PICT. 6



SWATH JOINING (PICT. 6)

SET THE MACHINE AS PER PICT. 5 ABOVE.
MAKE SWATHS CLOSER OF ABOUT 30 CM (1FT) THEN RUN THE MACHINE THROUGH THE SWATHS FOR JOINING.

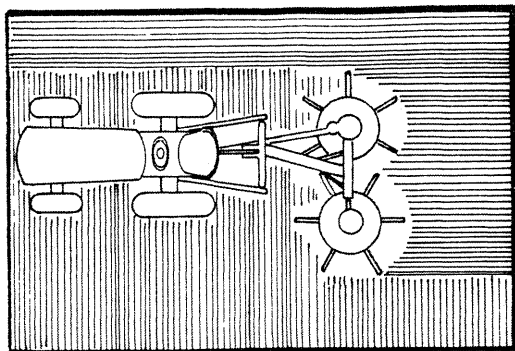
PICT. 7



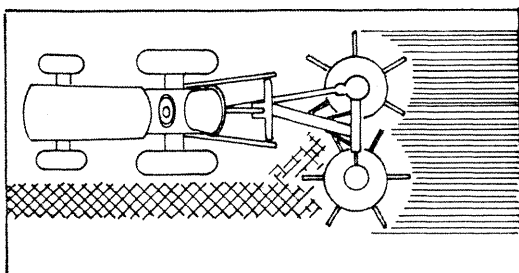
SWATH TURNING (PICT. 7)

SET THE MACHINE AS PER PICT. 5 ABOVE.
AFTER SETTING, THE MACHINE CAN BE USED FOR TURNING SWATHS OF DELICATE CROPS (ALFALFA, CLOVER) OR HALF-DRIED HAY.

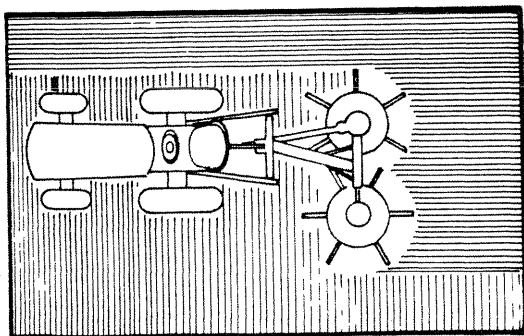
PICT. 8



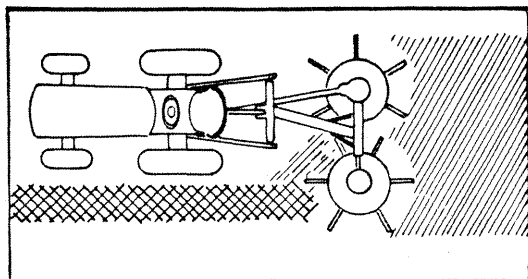
PICT. 9



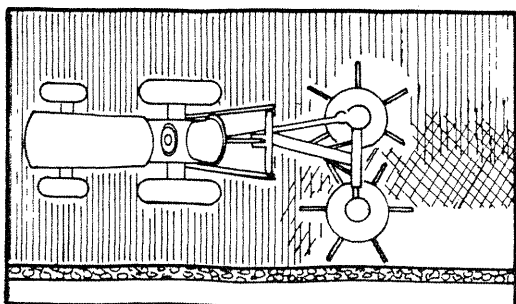
PICT. 10



PICT. 11



PICT. 12



SPREADING AND TURNING DELICATE OR HALF-DRIED CROPS (PICT. 8)

- A - BRING IT TO MINIMUM WORKING WIDTH OR ABOUT
- B - FIT THE WHEELS OF TINE ARMS INTO THE CAM SLOT (PICT. 1)
- C - BRING THE ROTORS PARALLEL TO THE GROUND OR SLIGHTLY INCLINED FORWARD (PICT. 3)
- D - POSITION THE CAMS AS PER PAGE 7
- E - 300-400 P.T.O.'s R.p.m.
- F - 4 TO 10 KM/HR (2.5 TO 6 MILES/HR) FORWARD SPEED

SPREADING SWATHS OF DELICATE OR HALF-DRIED CORPS (PICT. 9)

SET THE MACHINE AS PER PICT. 8 ABOVE.

SPREADING AND TURNING NEW-MOWN HAY (PICT. 10)

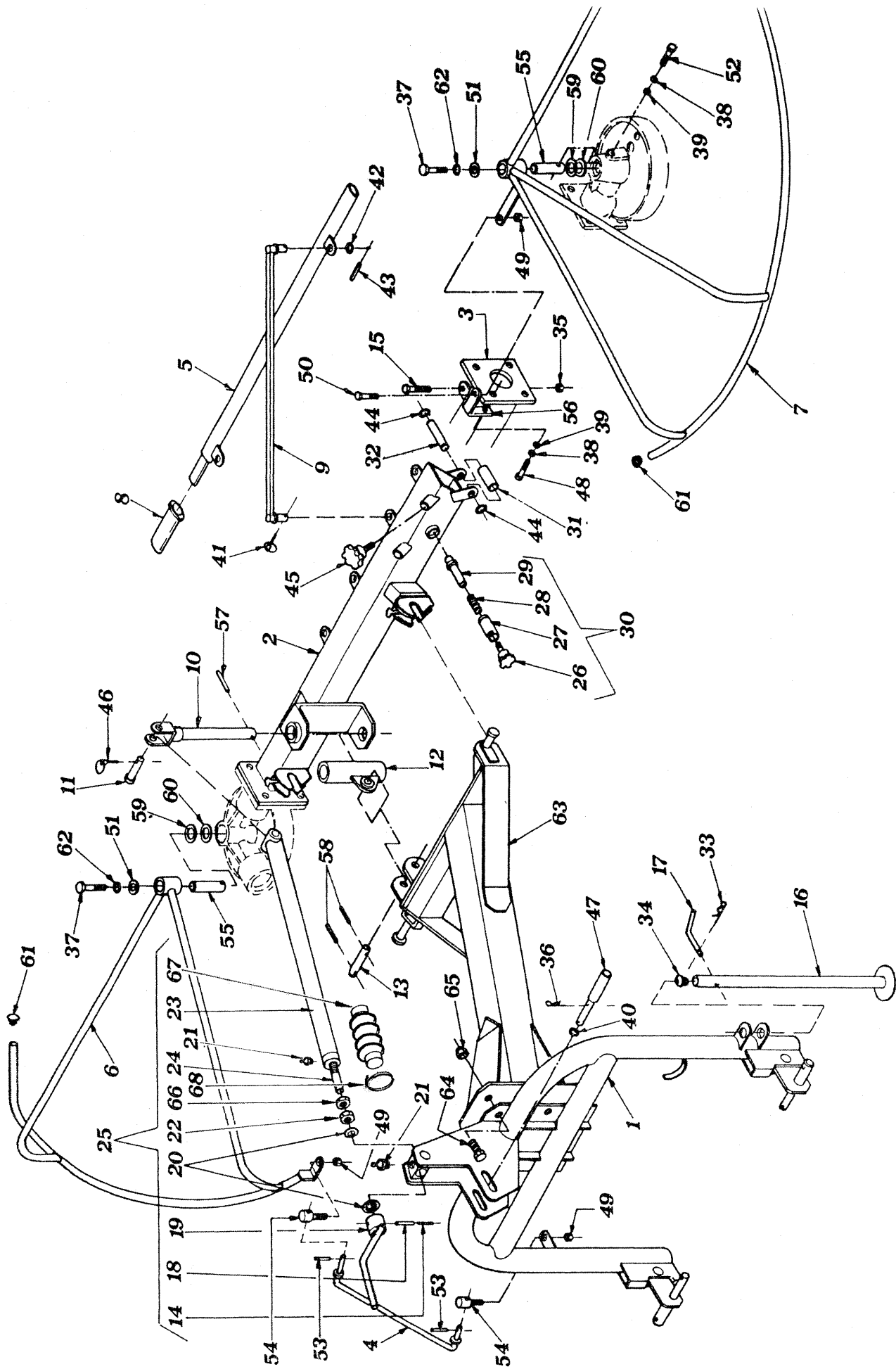
- A - BRING IT TO MINIMUM WORKING WIDTH OR ABOUT
- B - FIT THE WHEELS OF TINE ARMS OUTER THE CAM SLOT (PICT.2)
- C - BRING THE ROTORS INCLINED FORWARD (
- D - POSITION THE CAMS AS PER PAGE 10
- E - 450-540 P.T.O.'s R.p.m.
- F - 4 TO 10 KM/HR (2.5 TO 6 MILES/HR) FORWARD SPEED

SPREADING WET OR HEAVY SWATHS (PICT. 11)

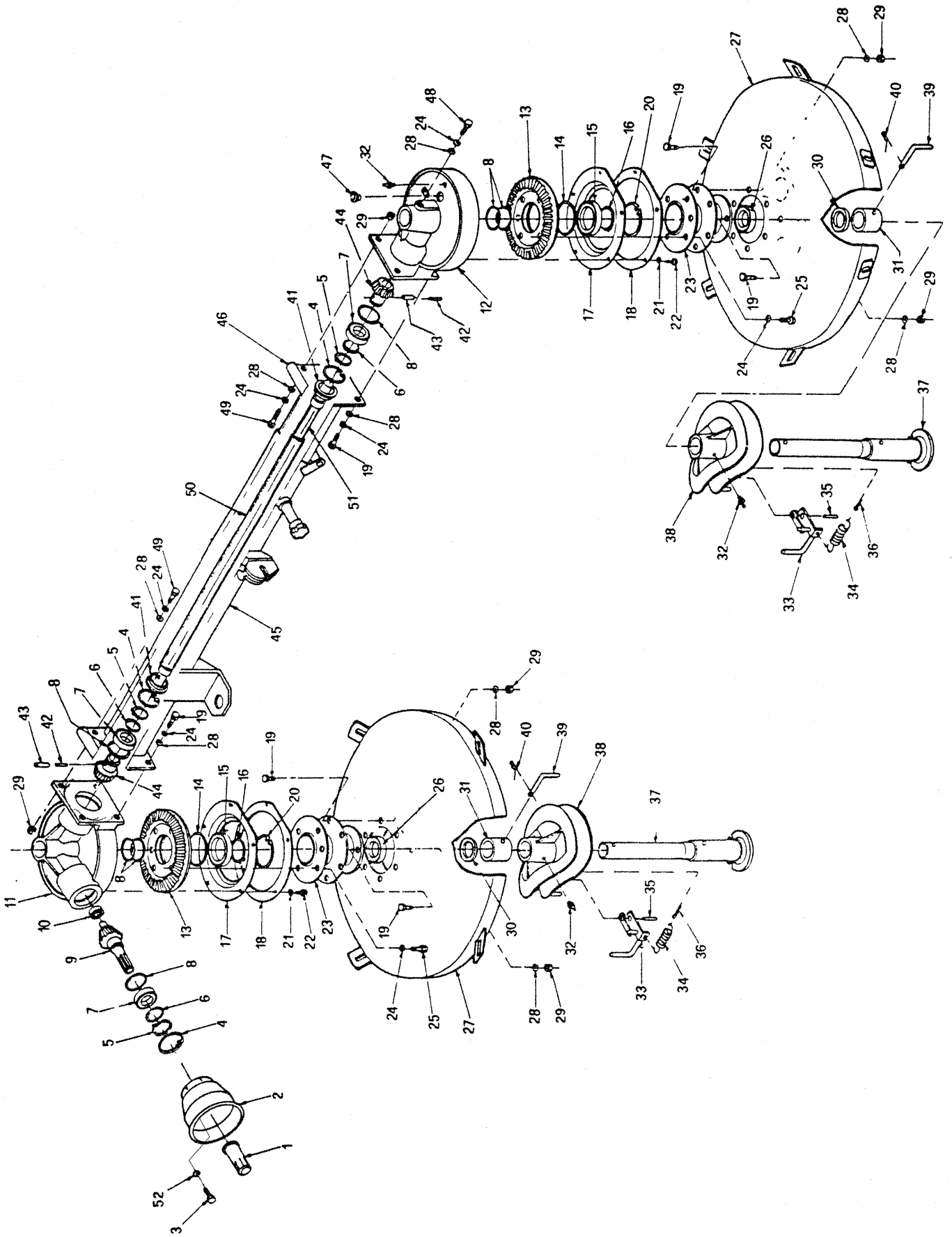
SET THE MACHINE AS PER PICT. 10 ABOVE.

BORDER CLEANING (DIGS, HEDGES, WALLS, FENCES, ETC.) PICT. 12

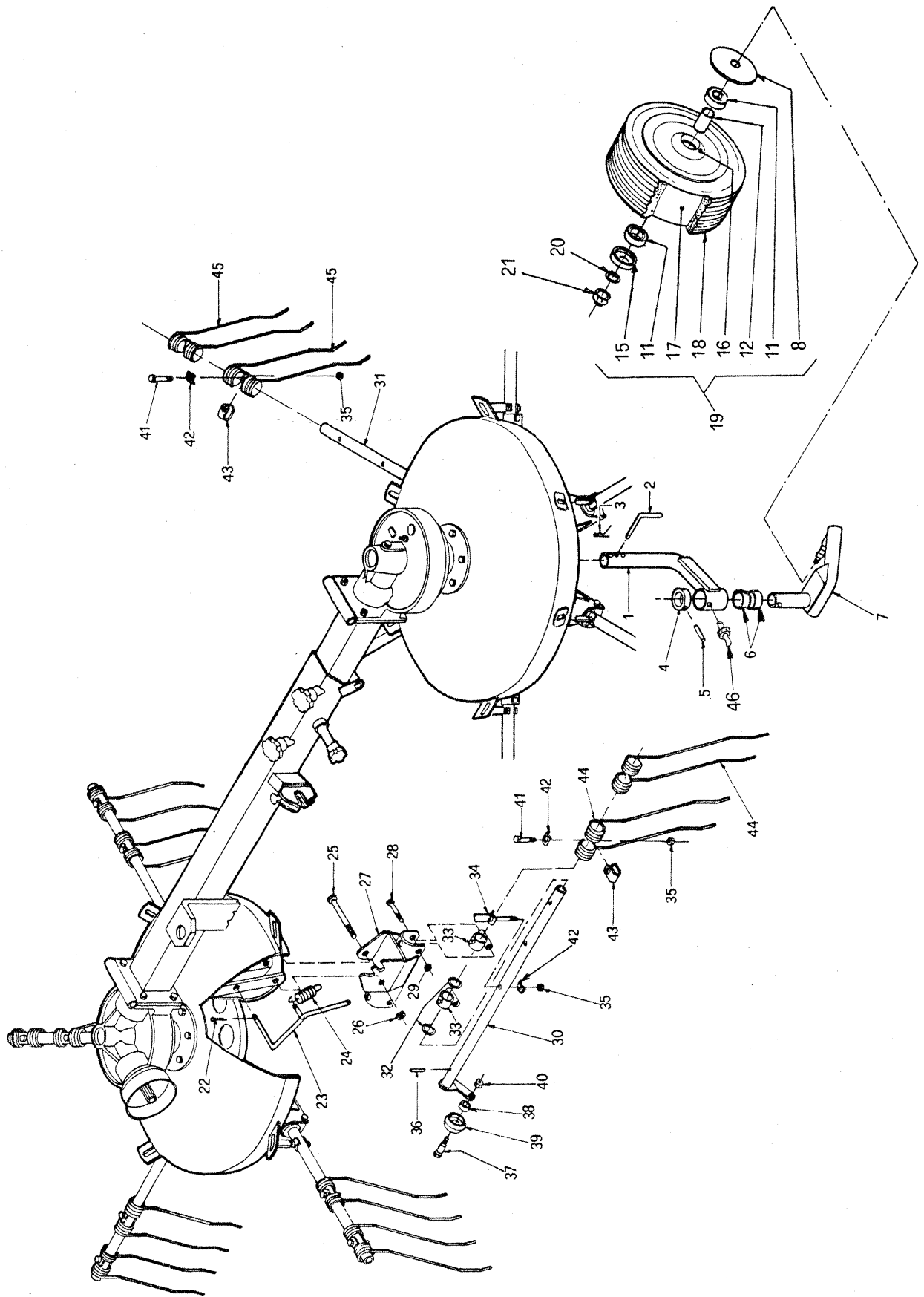
- A - BRING IT TO MINIMUM WORKING WIDTH OR ABOUT
- B - FIT THE WHEELS OF TINE ARMS INTO CAM SLOT (PICT. 1)
- C - BRING THE ROTORS PARALLEL TO THE GROUND OR SLIGHTLY INCLINED FORWARD AS PER PAGE
- D - POSITION THE CAM OF THE OTHER ROTOR AS PER PAGE
- E - 300-400 P.T.O.'s R.p.m.
- F - 4 TO 10 KM/HR (2.5 TO 6 MILES/HR) FORWARD SPEED



UNIVERSAL 400 TABLE NO 920.019				
POS	Q.TE	CODE	DESCRIPTION	NOTE
1	1	210.048	3 PT. HITCH	
2	1	200.735/A	OUTER SEMI-AXLE	
3	1	200.736/A	INNER SEMI-AXLE	
4	1	200.732/A	ARM	
5	1	200.685	LEVER	
6	1	210.004	RH GUARD	
7	1	200.961	LH GUARD	
8	1	600.727	HANDLE	
9	1	200.686	ARM	
10	1	200.999	PIN	
11	1	200.327	PIN	
12	1	210.001	BUSHING	
13	1	210.008	PIN	
14	1	600.673	SPRING PIN D 5 X 40 DIN 1481	
15	1	600.618	SCREW M12 X 60 DIN 931 8.8	
16	1	200.324	SUPPORT	
17	1	200.328	PIN	
18	1	600.108	SPRING PIN D 8 X 40 DIN 1481	
19	1	200.434	CRANK	
20	2	200.664	DISTANCE PIECE	
21	2	600.124	GREASE NIPPLE M6	
22	1	600.725	NUT M24 DIN 936 - 8	
23	1	200.447	TIEROD,BODY	
24	1	200.469	TIEROD	
25	1	200.665	TIEROD,COMPLETE	
26	1	600.592	KNOB	
27	1	200.373	BUSHING	
28	1	200.374	SPRING	
29	1	200.372	PIN	
30	1	200.331	LOCK	
31	1	200.339	ROLLER	
32	1	200.338	PIN	
33	1	600.019	PIN	
34	1	200.309	COVER	
35	1	600.077	NUT M12 DIN 980	
36	1	600.308	PIN	
37	2	600.441	SCREW M12 X 25 DIN 933 8.8	
38	3	600.633	SPRING WASHER D 12,5 DIN 6798	
39	3	600.088	FLAT WASHER D 13 DIN 125A	
40	1	600.632	FLAT WASHER D 21 DIN 125A	
41	1	600.723	PIN	
42	1	600.031	FLAT WASHER D 17 DIN 125A	
43	1	600.413	SPRING PIN D 5 X 30 DIN 1481	
44	2	600.533	RETAINING RING E 16 DIN 471	
45	2	600.591	KNOB	
46	1	600.017	PIN	
47	1	200.343	PIN	
48	1	600.753	SCREW M12 X 55 DIN 931 8.8	
49	3	600.029	NUT M10 DIN 980	
50	1	600.148	SCREW M10 X 30 DIN 933 8.8	
51	2	600.092	FLAT WASHER D12 X36	
52	2	600.564	SCREW M12 X 60 DIN 933 8.8	
53	2	600.106	SPRING PIN D 3,5X18 DIN 1481	
54	2	200.731	PIN	
55	2	200.730	PIN	
56	1	200.733	BRACE	
57	1	600.586	SPRING PIN D 10 X 60 DIN 1481	
58	2	600.674	SPRING PIN D 5 X 40 DIN 1481	
59	2	200.274	DISTANCE PIECE	
60	2	200.275	DISTANCE PIECE	
61	3	600.855	COVER	
62	2	600.634	SPRING WASHER D 12,5 DIN 6798	
63	1	210.049	FRAME	
64	6	600.035	SCREW M16 X 40 DIN 933 8.8	
65	6	600.080	NUT M16 DIN 980	
66	1	220.533	NUT	
67	1	220.192	RUBBER COVER	
68	1	610.507	CLAMP	

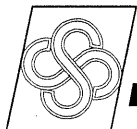


UNIVERSAL 400 TABLE NO 920.020				
POS.	Q.TE	CODE	DESCRIPTION	NOTE
1	1	600.172	GUARD	
2	1	600.818	HOOD	
3	1	600.667	SCREW M 6 X 12 DIN 933 4.8	
4	3	600.536	SNAP RING I 75 DIN 472	
5	3	600.534	SNAP RING E 45 DIN 471	
6	3	200.377	SHIM	
6	3	200.376	SHIM	
7	3	600.525	BEARING 6009 2RS	
8	7	200.379	SHIM	
8	7	200.378	SHIM	
9	1	200.370	P.T.O.	
10	1	600.526	BEARING 63004 2RS	
11	1	200.362	GEARBOX	
12	1	200.363	GEARBOX	
13	2	200.368	CROWN	
14	2	200.380	SHIM	
14	2	200.382	SHIM	
15	2	600.523	BEARING 6013 2RS	
16	2	600.535	SNAP RING E 65 DIN 471	
17	2	200.366	CROWN COVER	
18	2	200.367	FLANGE TO SUPPORT COVER	
19	22	600.004	SCREW M12 X 30 DIN 933 8.8	
20	2	600.537	SNAP RING I 100 DIN 472	
21	10	600.513	WASHER D 6,4 DIN 125A	
22	10	600.667	SCREW M 6 X 12 DIN 933 4.8	
23	2	200.365	FLANGE	
24	22	600.633	WASHER D 12,5 DIN 6798	
25	12	600.615	SCREW M12 X 35 DIN 933 8.8	
26	2	600.524	FLANGE 6010 2RS	
27	2	200.364	ROTOR	
28	28	600.088	WASHER D 13 DIN 125A	
29	22	600.366	SELF-LOCKING NUT M12 DIN 982 - 8	
30	2	200.360	SHIM	
31	2	200.359	BUSHING	
32	4	600.034	GREASE NIPPLE M8	
33	2	200.357	LEVER	
34	2	200.340	SPRING	
35	2	600.541	SPRING PIN D 10 X 55 DIN 1481	
36	2	600.544	SPLIT PIN D 5 X 25 DIN 94 3.6	
37	2	200.356	CENTER PIN	
38	2	200.361	CAM	
39	2	200.358	PIN	
40	2	600.308	SPLIT PIN	
41	2	200.371	RING	
42	2	600.539	SPRING PIN D 6 X 45 DIN 1481	
43	2	600.540	SPRING PIN D 10 X 45 DIN 1481	
44	2	200.369	PINION	
45	1	200.735/A	SEMI-AXLE, OUTER	
46	1	200.736/A	SEMI-AXLE, INNER	
47	2	200.510	CAP	
48	2	600.564	SCREW M12 X 60 DIN 933 8.8	
49	3	600.153	SCREW M12 X 45 DIN 933 8.8	
50	1	200.389	DRIVE SHAFT, OUTER	
51	1	200.388	DRIVE SHAFT, INNER	
52	2	600.514	WASHER D 6,4 DIN 125A	



UNIVERSAL 400 TABLE NO 920.021

POS.	Q.TE	CODE	DESCRIPTION	NOTE
1	2	200.355/A	UPPER SUPPORT OF TIRE	
2	2	200.358	PIN	
3	2	600.308	SPLIT PIN	
4	2	200.354	BUSHING	
5	2	600.486	SPRING PIN D 8 X 60 DIN 1481	
6	4	610.147	BUSHING	
7	2	200.352	LOWER SUPPORT OF TIRE	
8	2	200.720	BEARING COVER,INNER	
11	2	600.602	BEARING 6205 2RS	
12	2	200.245	SPACER	
15	2	200.247	BEARING COVER,OUTER	
16	2	600.637/A	CIRCLE ASSY	
17	2	600.638	TUBE	
18	2	600.639	TIRE	
19	2	200.295	TIRE ASSY	
20	2	600.031	WASHER D 17 DIN 125A	
21	2	600.197	SELF-LOCKING NUT M16 DIN 982 - 8	
22	12	600.544	SPLIT PIN D 5 X 25 DIN 94 3.6	
23	12	200.346	LEVER	
24	12	200.340	SPRING	
25	12	600.779	SCREW M16 X160 DIN 931 8.8	
26	12	600.080	NUT M16 DIN 980	
27	12	200.345/A	SUPPORT	
28	24	600.528	SCREW M10 X 65 DIN 931 8.8	
29	24	600.029	NUT M10 DIN 980	
30	6	200.500	TINE ARM,RH	
31	6	200.501	TINE ARM,LH	
32	24	200.272	SHIM	
33	24	200.344	SUPPORT	
34	12	200.347	COUPLING	
35	36	600.366	SELF-LOCKING NUT M12 DIN 982 - 8	
36	12	600.674	SPRING PIN D 5 X 40 DIN 1481	
37	12	200.341	PIN	
38	12	200.493	BUSHING	
39	12	200.342	SMALL WHEEL	
40	12	600.077	NUT M12 DIN 980	
41	24	600.530	SCREW M12 X 65 DIN 931 8.8	
42	36	200.348	TINE LOCK,RIGID	
43	24	200.349	TINE LOCK,FLEXIBLE	
44	12	200.350	TINE,RH	
45	12	200.351	TINE,LH	
46	2	600.124	GREASE NIPPLE M6	



sitrex AGRICULTURAL MACHINERY®

Zona Industriale-Viale Grecia, 8
06018 TRESTINA-(Perugia)-ITALY
Tel. +39.075.8540021-Telefax +39.075.8540523
e-mail: sitrex@sitrex.it www.sitrex.com

