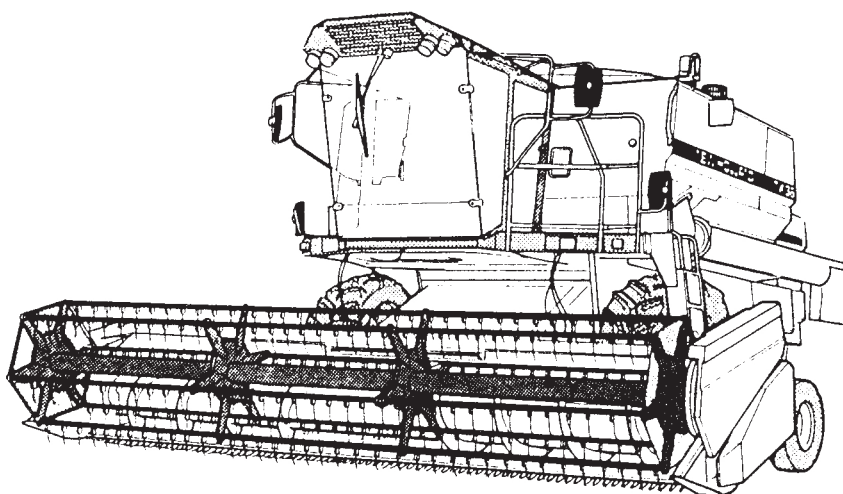


NEW HOLLAND



Training Course

Combines TF and TX Series



NEW HOLLAND

The winning team

Product: New Holland TF and TX Combine Training Service Repair Manual
Full Download: <https://www.arepairmanual.com/downloads/new-holland-tf-and-tx-combine-training-service-repair-manual/>

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<https://www.arepairmanual.com/downloads/new-holland-tf-and-tx-combine-training-service-repair-manual/>

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INTRODUCTION

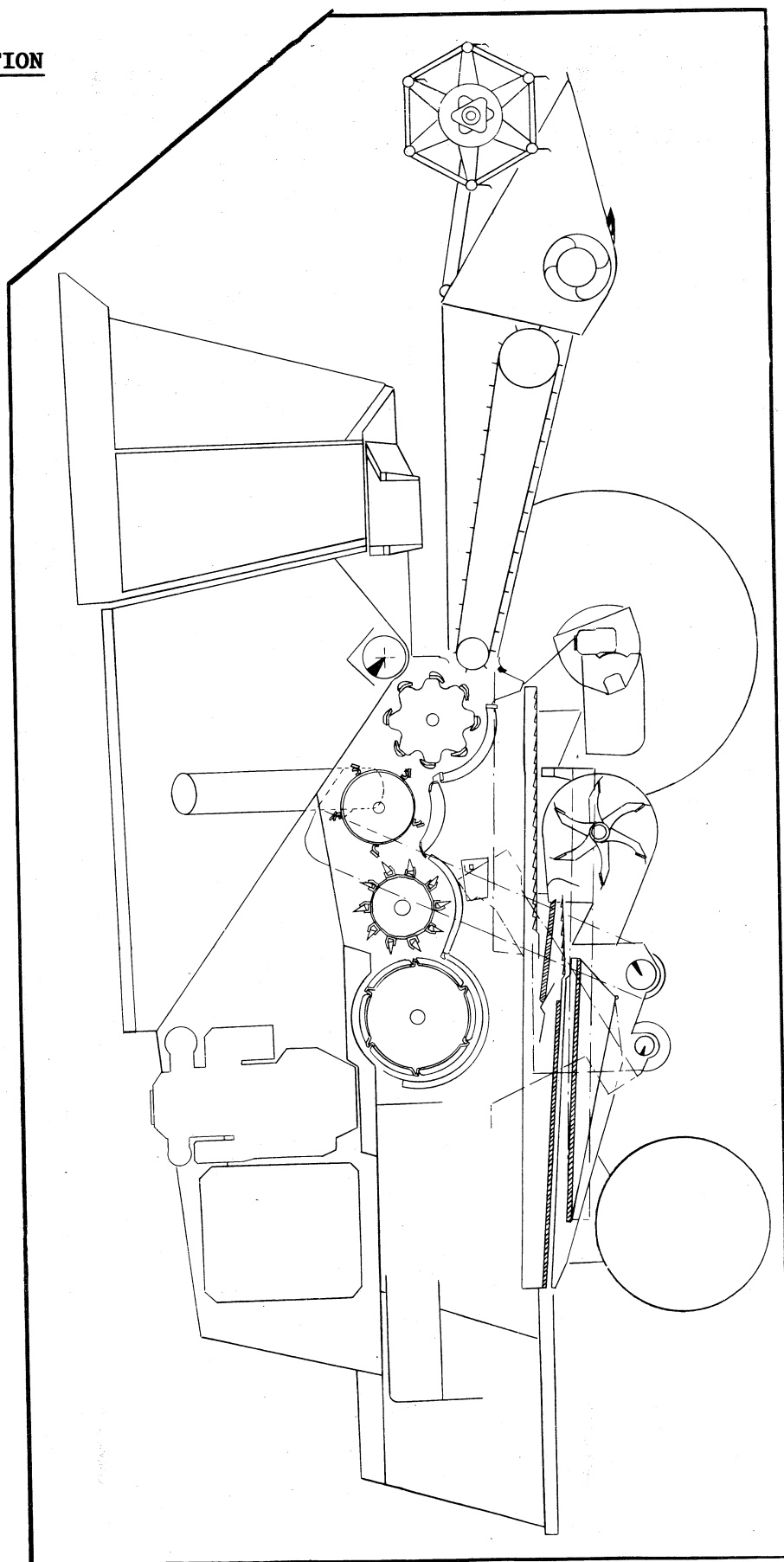


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1. LONGITUDINAL SECTION

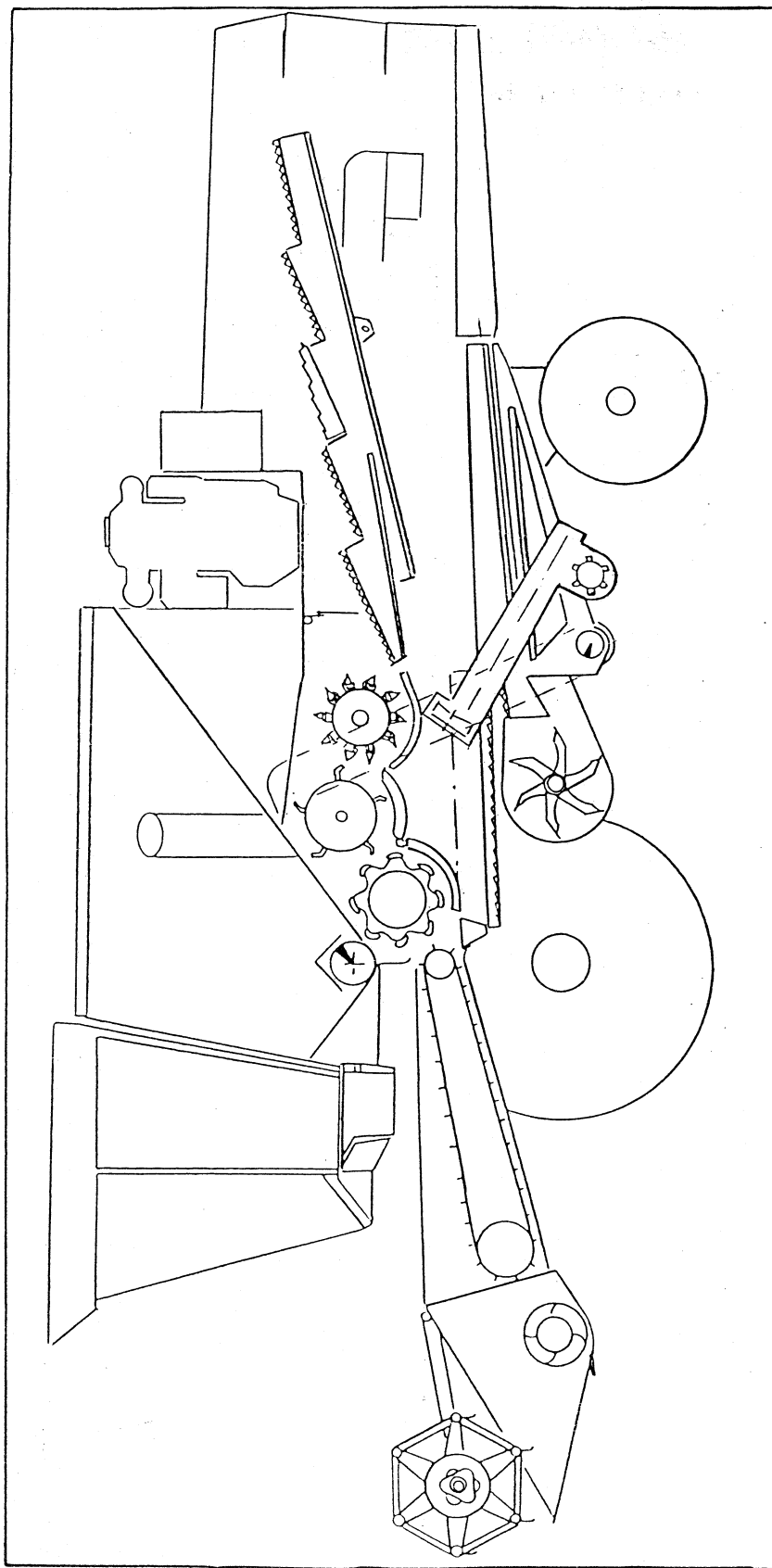
TF42-TF44-TF46

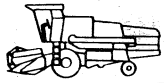




2. LONGITUDINAL SECTION

TX30/32/34/36



**EXPLANATION OF MACHINE AND HEADER SERIAL NUMBERS****1. MACHINE SERIAL NUMBER**

n° 4102112

type 41 _____

series 02 _____

number 112 _____

Explanation of types:

type 71 = TF42	type 76 = TX36
72 = TF44	77 = TX32
74 = TF46	81 = TX30
75 = TX34	

Examples:

7110 - TF42 - series 10
7211 - TF44 - series 11
7401 - TF46 - series 01
7515 - TX34 - series 15

2. HEADER NUMBER

example 1502345

header width 15 ft _____

series 02 _____

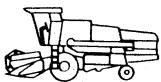
header number _____

The width is given in ft (1 ft = 30.4 cm)
The available widths are: 10 - 12 - 13 - 15 - 17 - 20 - 24 ft.

Note: 10 ft header is without full width retractable tines

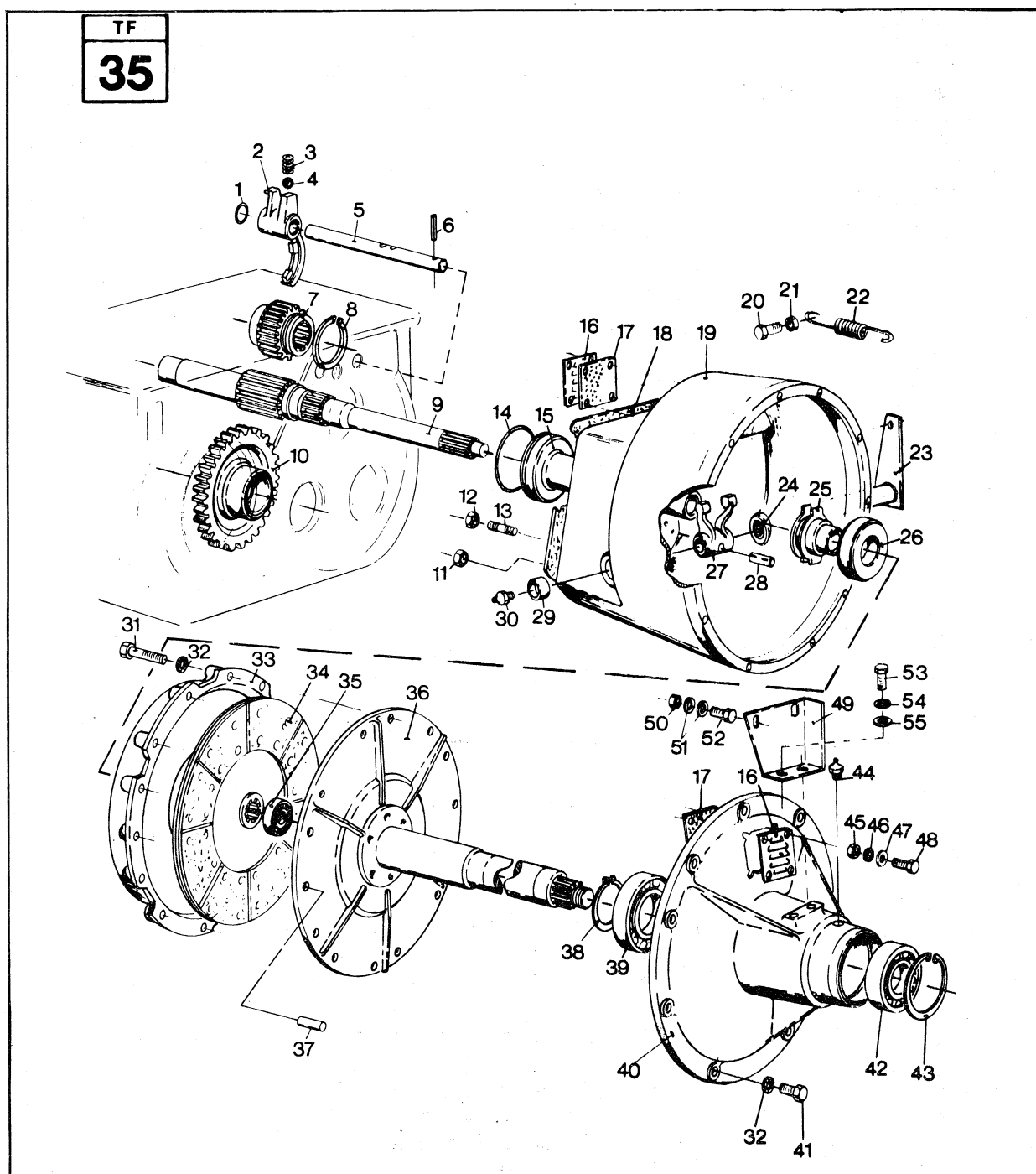
The first two figures of the maize headers stand for the following:

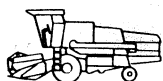
- 54 : 3-row maize head
- 55 : 4-row maize head
- 56 : 5-row maize head
- 57 : 6-row maize head
- 58 : 8-row maize head



3. PARTS LIST FROM SERVICE PARTS CATALOGUE

Column 1 : Fig. - indication of the part on the drawing
2 : Order ref. - part number
3 : CD - computer control code
4 : Qty. : quantity
5 : Code : serial number of the machine concerned
6 : Description
7 : Time allowed to service this part.



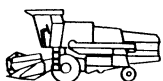


MECHANICAL DRIVE
TRANSMISSION MECHANIQUE
MECHANISCHER FAHRANTRIEB
TRAZIONE MECCANICA
MECHANISCHE TRAKTIE

FOR TF 42 ONLY

Fig.	Order Ref.	CD	T F 4 2	T F 4 4	Code	Description	N.B.
1	129979	3	1			"O"ring	
2	421479	8	1			Fork	
3	390835	6	1			Spring	
4	210006	2	1			Ball	
5	430773	3	1			Shaft	
6	300872	6	1			Roll pin	
7	395964	4	1			Gear	
8	412068	6	1			Snap ring	
9	395966	8	1			Drive shaft	
10	395965	6	1			Gear	
11	100038	6	4			Hex. locknut	
12	100037	4	2			Hex. locknut	
13	412193	1	2			Stud	
14	433629	1	1			"O" ring	
15	430437	1	1			Guide bushing	
16	448909	2	2			Protection plate	
17	448910	5	2			Grill	
18	430801	4	1	100		Gasket	
	456162	8	1	101		Gasket	
19	448793	5	1	100		Clutch housing	3,8
	456651	5	1	101		Clutch housing	
20	120112	8	2			Hex. cap screw	
21	100016	0	2			Hex. nut	
22	442353	7	1			Spring	
23	443252	4	1			Coupling shaft	3,8
24	420434	3	1			Sleeve bushing	
25	442368	8	1			Bracket] 2,5
26	454372	1	1			Thrust bearing	
27	398560	1	1			Fork	3,8
28	357924	4	1			Pin	
29	420410	3	1			Sleeve bearing	
30	323713	7	2			Grease fitting	
31	120062	1	12			Hex. cap screw	
32	322358	2	21			Tooth lockwasher	
33	450248	4	1			Clutch plate assy.] 3,0
34	450249	6	1			Clutch disc	
35	362804	7	1			Ball bearing	3,2
36	436003	8	1			Drive plate	3,7
37	412098	9	2			Pin	
38	370027	9	1			Snap ring	
39	435918	6	1			Ball bearing	4,1
40	448791	1	1			Flange	4,2

GROUP
35

**CONVERSION CHART**

	foot	yard	mile	inch	metre
1 foot	1	0.333	-	12	0.3048
1 yard	3	1	-	36	0.9144
1 mile	5280	1760	1	63360	1609.35
1 inch	0.0833	0.0277	-	1	0.0254
1 metre	3.281	1.0936	-	39.37	1

1 US bushel = 35.2391 liter

1 US quart = 0.9464 liter

1 UK bushel = 36.3687 liter

1 UK quart = 1.1365 liter

1 US gallon = 3.785 liter

1 UK gallon = 4.5461 liter

1 barrel = 158.987 liter

1 acre = 0.4047 ha

1 pound = 0.4536 kg

1 hp = 0.736 kW

1 lbs/sq in = 0.0689 bar

= 6.894 kPa

1 Pa = 10^{-5} bar= 1.450×10^{-4} lbs/sq in

1 kgm = 9.806 Nm

1 lbs.ft = 0.1385 kgm

1 l = 0.028 US bushel

1 l = 1.056 US quart

1 l = 0.027 UK bushel

1 l = 0.879 UK quart

1 l = 0.264 US gallon

1 l = 0.22 UK gallon

1 l = 0.0063 barrel

1 ha = 2.471 acre

1 kg = 2.204 pound

1 kW = 1.358 hp

1 bar = 14.5 lbs/sq in

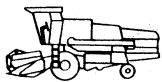
1 kPa = 0.145 lbs/sq in

1 bar = 100 kPa

1 lbs/sq in. = 6.896 kPa

1 Nm = 0.1019 kgm

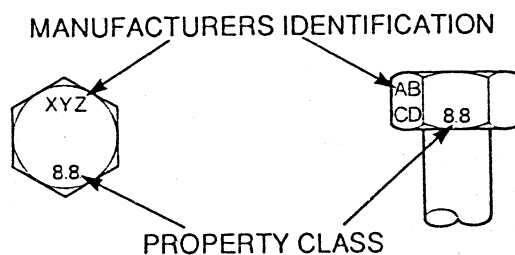
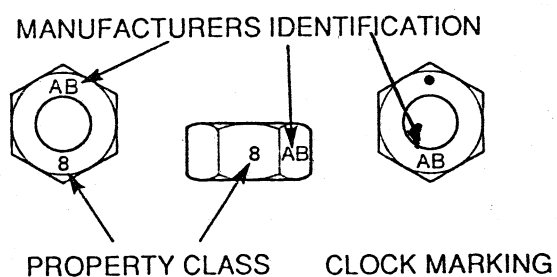
1 kgm = 7.22 lbs.ft

**TIGHTENING TORQUES****1. Metric hardware**

Zinc-coated or bichromated bolts

Diameter	5.8	8.8		10.9
	Torque in Nm			
M4	2.2	1.8*	3.4	4.8
M6	7.6	6.3*	12	17
M8	18	15*	28	40
M10	36	30*	56	79
M12	63	53*	97	138
M16	158	131*	240	344
M20	307	265*	485	671
M24	531	458*	839	1160

* Torque for lock nut only

**IDENTIFICATION
HEX CAP SCREWS AND CARRIAGE BOLTS
CLASSES 5.6 AND UPWARDS****HEX NUTS AND LOCK NUTS
CLASSES 05 AND UPWARDS**



2. Imperial hardware

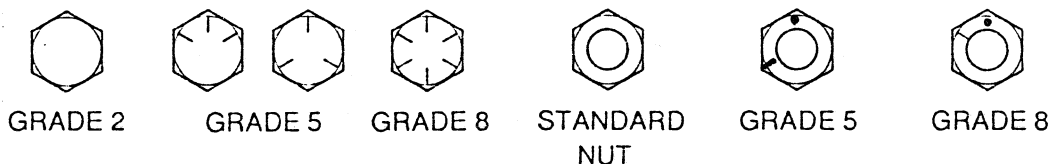
Zinc-coated or bichromated bolts

Diameter	SAE GR 2	SAE GR 5		SAE GR 8	
	Torque in Nm				
1/4"	8.1	6.9*	13	9.8*	18
5/16"	17	14*	26	20*	37
3/8"	30	26*	46	35*	65
7/16"	47	41*	73	57*	104
1/2"	73	61*	113	88*	159
9/16"	104	88*	163	125*	229
5/8"	145	122*	224	172*	316
3/4"	256	217*	397	306*	560
7/8"	248	350*	641	494*	904
1"	373	523*	960	739*	1356

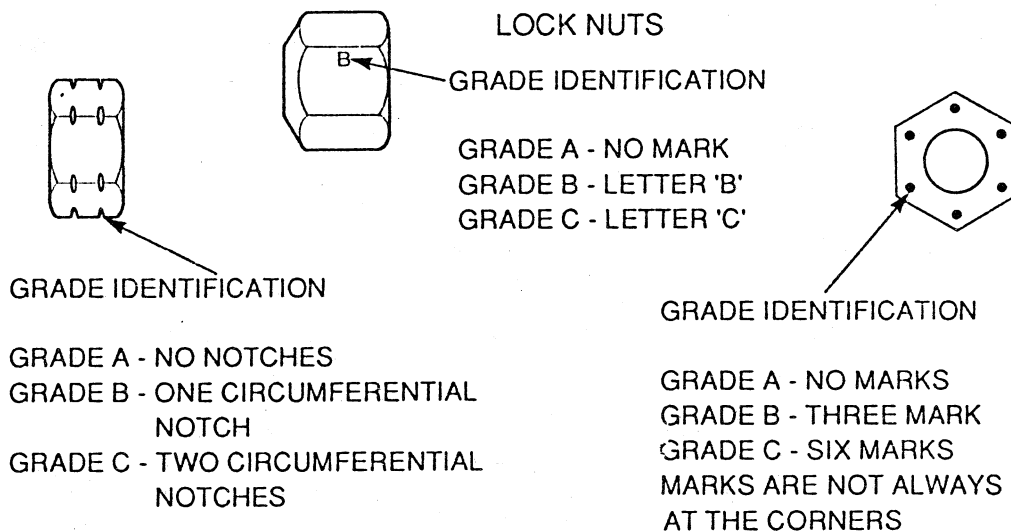
* Torque for lock nut only

IDENTIFICATION

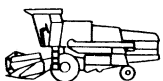
CAP SCREWS AND CARRIAGE BOLTS



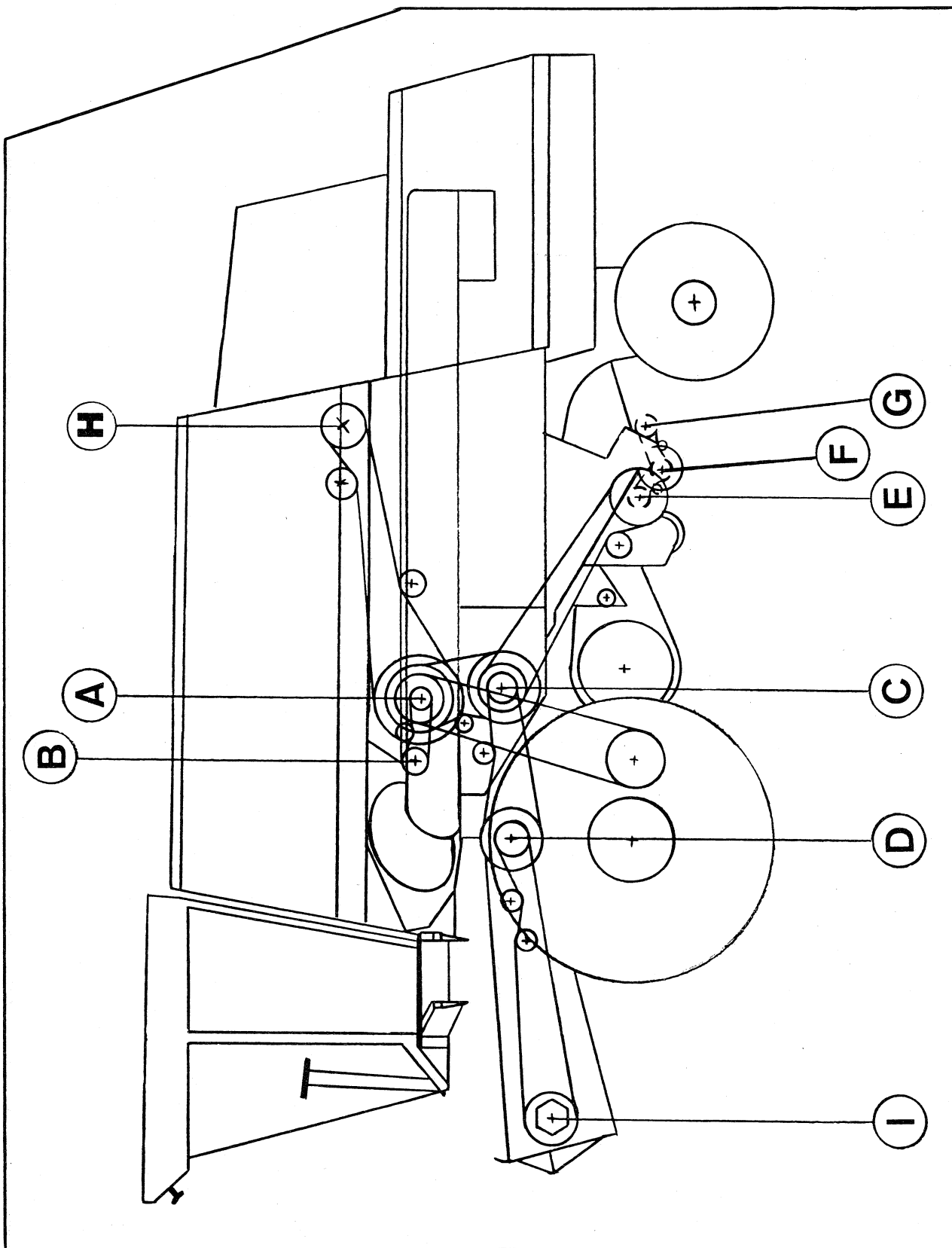
LOCK NUTS

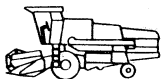


SPEED RANGES



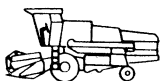
TF42-TF44-TF46 left-hand side



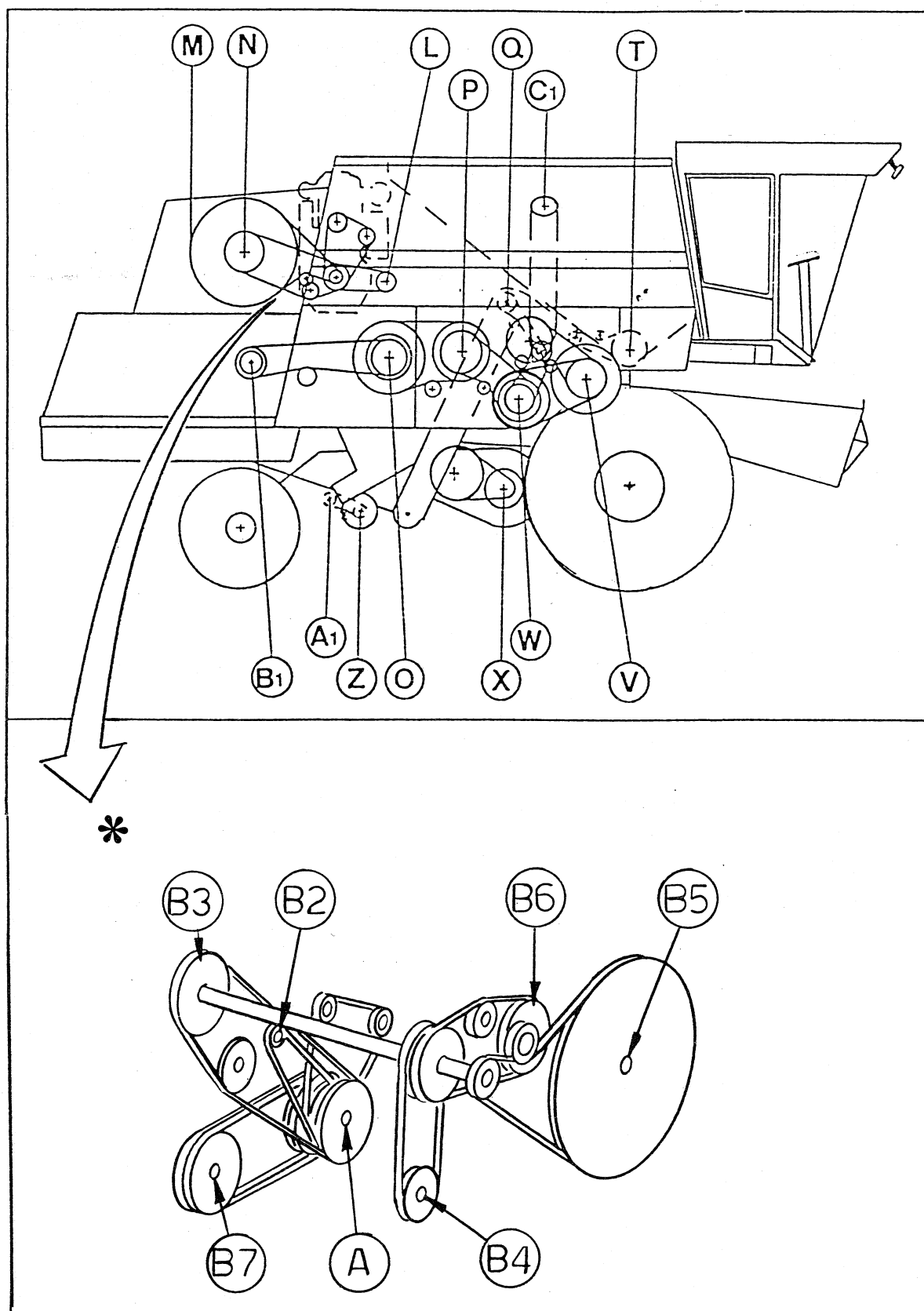


Revolutions per minute⁻¹ - TF42-TF44-TF46 left-hand side

A =	beater -	256-760
B =	bottom auger intermediate shaft -	1340
C =	intermediate shaft -	800
D =	straw elevator top shaft -	374
E =	cleaning shoe drive -	320
F =	roto-thresher	800
G =	tailings elevator -	800
H =	engine -	2400 (TF44/46) and 2500 (TF42)
I =	header drive -	433



TF42/TF44/TF46 right-hand side





Revolutions per minute⁻¹ - TF42-TF44-TF46 right-hand side

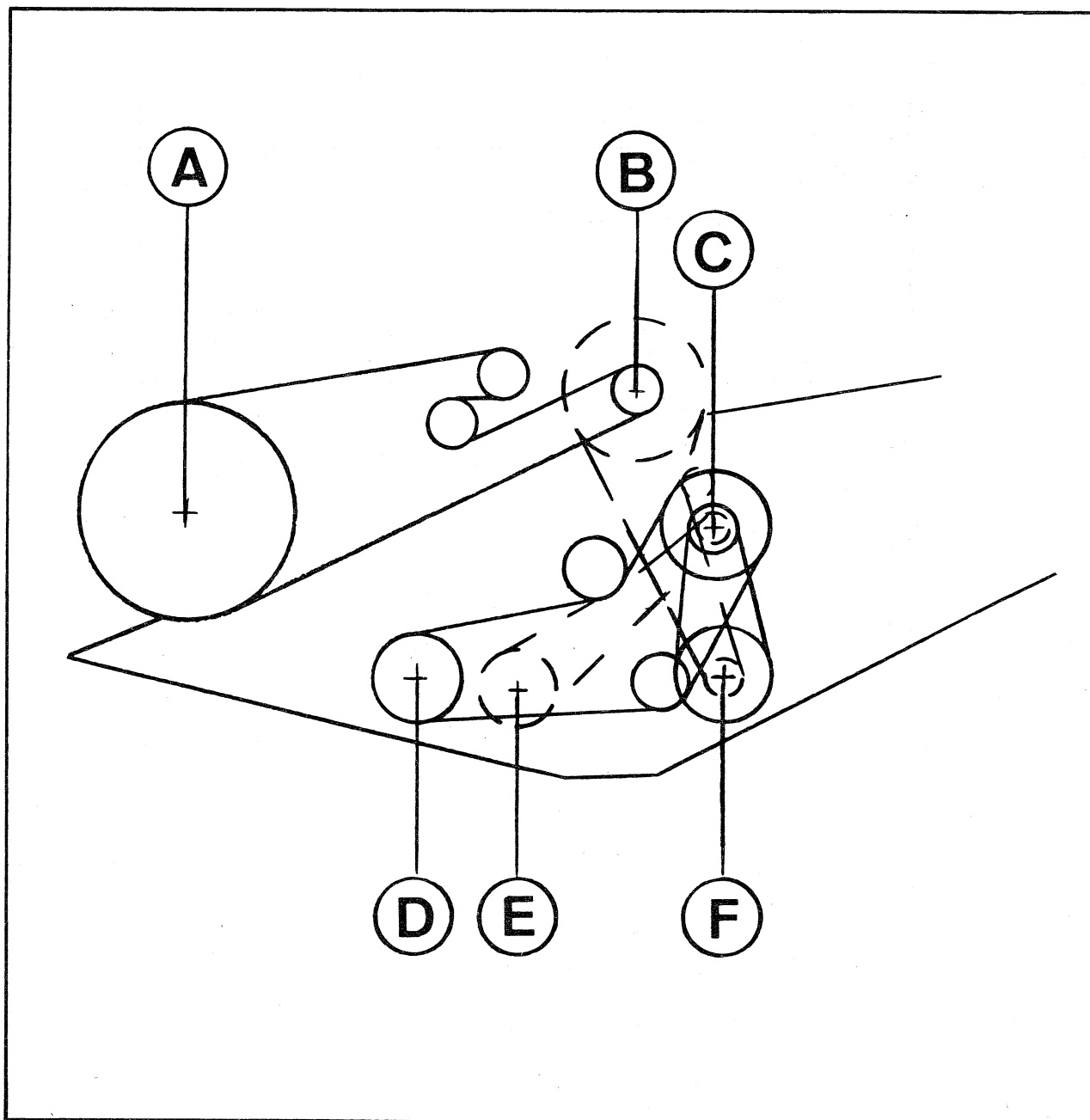
A1 = tailings elevator -	793
B1 = discharge beaters -	1000 or 1200
C1 = bubble-up auger -	368
L = airconditioning compressor -	3029 - 3181
M = rotary dust screen -	424 (TF 46)
N = engine cooling -	2444 (TF 46)
O = rotor -	343 or 651
P = rotary separator -	400 or 760
Q = grain elevator -	382
T = grain tank bottom auger -	620
V = drum variator -	385 - 1140
W = intermediate shaft -	800
X = cleaning fan -	460 - 950
Z = roto-thresher -	793

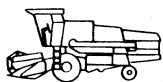
* TF 42/44 from series 7120/7220 onwards

A = engine crankshaft -	2400 TF 44
	2500 TF 42
B2 = alternator -	5733
B3 = intermediate shaft -	2600
B4 = AC compressor -	3000
B5 = rotary dust screen -	200
B6 = engine fan -	2350 TF 44
	2580 TF 42
B7 = hydraulic pump -	2400 TF 44
	2500 TF 42



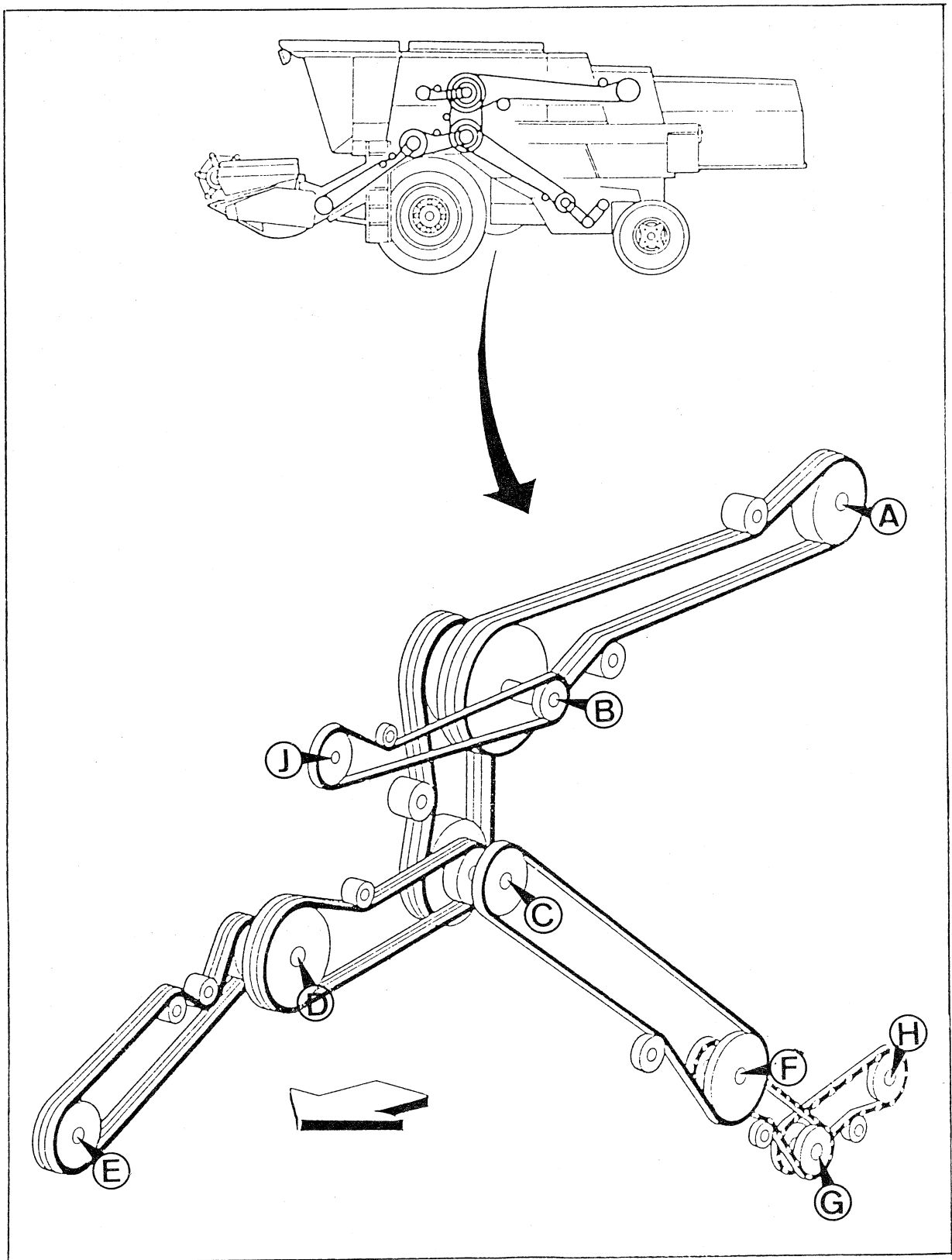
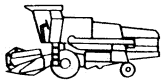
HEADER



HEADER

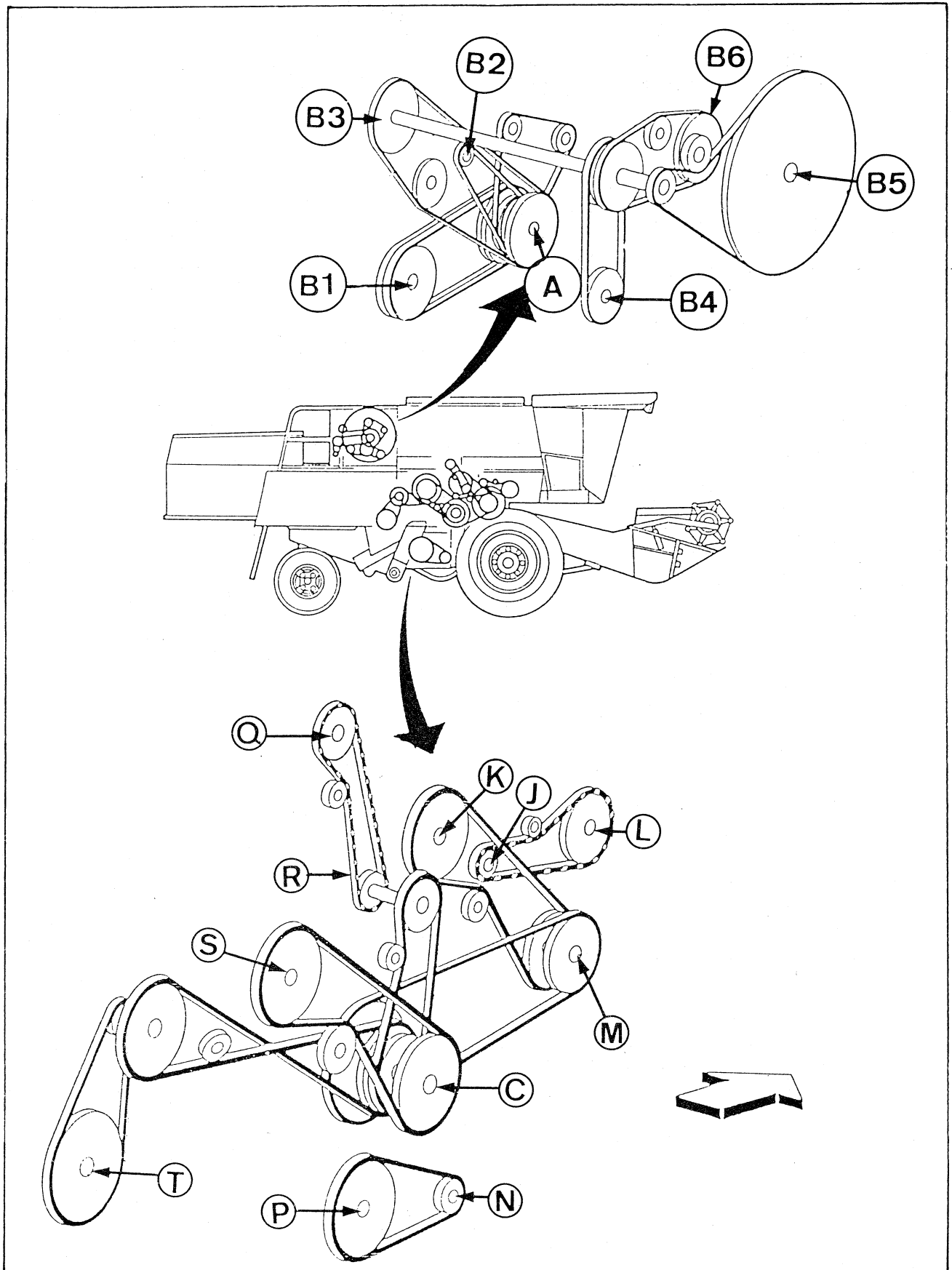
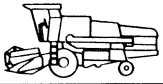
rpm

A =	reel -	21 - 57 or 12 - 32
B =	reel arm pulley -	80 - 218 or 45 - 123
C =	reel variator top shaft -	433
D =	wobble box -	530 (old type)
	-	575 (new type)
E =	feed auger -	192 or 149
F =	reel variator bottom shaft -	263 - 712



TX30 - TX32 - TX34 - TX36 left-hand side

	rpm
A: engine	2500
B: loose pulley on beatershaft	1340
C: intermediate shaft	800
D: straw elevator top shaft	374
E: header drive	433
F: cleaning shoe drive	320
G: returns cross auger and roto-thresher	800
H: returns auger and thrower	600
J: graintank unloading auger intermediate shaft	1340



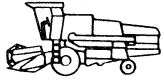
TX30 - TX32 - TX34 - TX36 right-hand side-Threshing, separation and cleaning area

	rpm
J: grain tank unloading intermediate shaft	1340
K: beater	256 - 760 (2/3 of threshing drum speed)
L: grain tank unloading auger	620
M: threshing drum	385 - 1140
N: fan	450 - 950
P: eccentric shaft	320
Q: grain elevator top shaft	
*standard	382
*option	456
R: bubble-up auger speed (gearbox)	
*standard	370
*option	441
S: rotary separator	760 or 400
T: straw walker	220

-Engine compartment

A: engine	2500
B1: hydraulic pump	2500
B2: alternator	5733
B3: intermediate shaft	2598
B4: airconditioning compressor	3000
B5: rotary screen	442
B6: cooling or engine fan	TX30/32: 2348
	TX34: 2348 - 678 HTA
	2446 - 678 HT
	TX36: 2580

TRACTION



TRACTION

02.00

Mechanical traction multi-use gearbox	02.01
Hydrostatic traction multi-use gearbox	02.02
Clutches	02.03
Traction variators	02.04
Brakes	02.05
Final drives	02.06
Dump pedal adjustment TX30 - 32 - 34 - 36 TF42 - 44 - 46	02.07

MECHANICAL TRACTION MULTI-USE GEARBOX

