



5.78 1974-1980

5-78
1974 – 1980

5HP & 7HP 25" CUT

Early models had solid tyres, later changed to pneumatics.

RIDER MOWER

OPERATING AND MAINTENANCE INSTRUCTIONS

IMPORTANT

Before starting engine make sure Forward/Reverse pedal is in neutral (central) position.

Keep feet clear of blades when starting and operating machine.

Blades cut right to edge on left side of machine.

Do not operate machine with broken blades or bent Blade Disc otherwise engine and other damage may result from vibration.

Check all bolts and nuts after first hour of running to ensure trouble-free service.

References to left or right side of machine are determined by sitting in the operating position.

TO START ENGINE: See Engine Maintenance Instruction Sheet.

TO OPERATE

TO DRIVE FORWARD: Set throttle lever to approximately half power. Set height control lever at the desired cutting height. Press ball of foot down on the front of the clutch pedal for forward movement.

TO REVERSE: Press heel of the foot down for Reverse movement.

NORMAL OPERATION: Speed is controlled by the amount of pressure exerted by the foot until full speed is obtained. Power is regulated by the throttle. Open the throttle sufficiently to cut the grass without labouring the engine. It is advisable with long grass to first cut on High setting, then cut down to required height. For very long grass, open the throttle for full power and ease the machine in, using the Drive as a clutch.

MANOEUVRING: Owing to the Clutch type action of the Friction Drive it is possible to take the machine straight from forward to reverse and vice versa. This instant forward and reverse operation makes the machine very manoeuvrable and the sharpest turns can be negotiated easily and quickly.

TO BRAKE: To stop suddenly, press pedal to the reverse position and bring back to neutral.

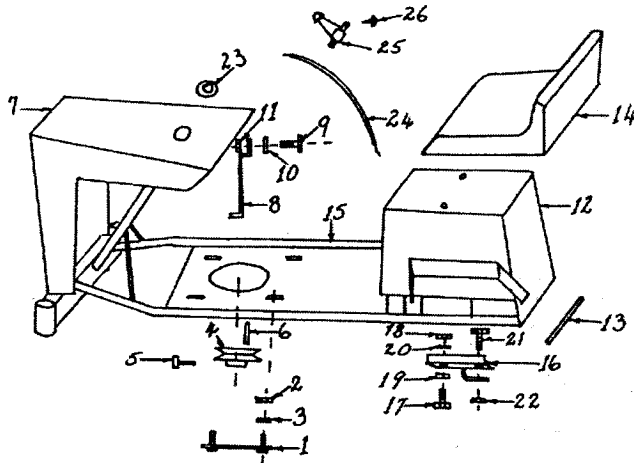
CUTTING HEIGHT ADJUSTMENT: The ratchet type height adjustment may be altered to suit varying conditions while the machine is in motion. For very low cutting, stepped blades are available. The standard flat blades cut quite low enough in the majority of cases. Thrower blades are also available for use with grass catcher.

NOTE: When mowing slopes leave the machine in forward drive when going downhill. The low gearing will prevent it from picking up excessive speed. If very steep it may be necessary to throttle back slightly.

1. **Oil Changing (Engine):** Change oil after first 5 hours running, thereafter change oil after every 25 hours running or more frequent in heavy conditions.
To change engine oil, lift machine and rest rear wheel on a standard 1 gallon oil can. Remove Oil Drain Plug and drain oil into suitable container. Replace plug, lower machine to level position, fill with new engine oil to top of filler.
IMPORTANT: Check oil level every few hours and top up if necessary, especially during first 25 hours running.
Air Filter: Clean filter and re-oil when changing engine oil as per engine instruction sheet. In very dusty conditions clean and re-oil Air Filter every few hours.
2. **Lubrication:** Lubrication of machine should also be carried out after every 25 hours of operation.
Oiling: A few drops of oil should be placed at the following points: Steering, Linkages, Steering Column Shaft (top and bottom), Height Adjustment mechanism, Pivot Bolt at front end of Drive Cone Arm, Drive Engaging Lever linkages and U type Hinge Brackets on rear axle housing.
NOTE: You are advised **not** to lubricate Drive Chain to rear wheels, except with proper chain lube.
Grease Points (Front): Grease nipples are located on each King Pin.
Do not allow grease or oil to come into contact with the Drive Cone Lining or the Clutch Discs. Should this occur clean off immediately with petrol.
3. **To Change Blades:** Remove High Tension Lead from Spark Plug. Remove side guard and put Height Adjustment Control to highest position. It will now be quite simple to remove the Blade Bolt and Nut with suitable spanner and replace worn blade. Revolve Blade Disc one half turn to remove other blade.
4. **To Remove Blade Disc:** Remove High Tension Lead from Spark Plug. Lift machine on its side so that right side of machine is on the ground. Rest seat against wall or solid support. Remove centre holding bolt, turning anti-clockwise. Disc is keyed to crankshaft and now can be pulled off by using a puller and the two holes provided in the disc.
NOTE: Cutter disk may be tight on shaft and in some cases could require heating of the disc boss.
Cutter disc must be replaced if the fit to the shaft is sloppy as a crankshaft breakage **will** result.
5. **V Belt Adjustment:** Loosen the four engine mounting bolts. Move engine forward and adjust belt to correct tension. Re-tighten bolts.
6. **To Fit New V Belt:** Loosen the four engine mounting bolts and move engine back, then follow instructions on TO REMOVE THE BLADE DISC. Remove Cutter Housing. Old Belt can now be removed. Fit new belt and adjust to correct tension. To reassemble reverse this procedure.
7. **To Adjust the Clutch Discs to Drive Cone Lining:** Periodically it will be found necessary to adjust the Clutch Discs as the Cone Lining wears. To carry out this operation first loosen the lock nuts and set screws holding the Discs in position. To adjust the Reverse Disc shift the height adjustment to the highest position. Place the back of the clutch pedal about 38mm (1 1/2") above the cutter housing. Move Reserve disc along the intershaft till it touches the Clutch Cone, then tighten set screws and lock nuts, then adjust Forward Drive Disc by moving inward to approximately 1.5mm (1/16") from Cone Lining. Tighten set screws and lock nuts.
8. **To Adjust Drive Chain:** Lift height adjustment to top notch. Loosen securing bolts on Inner Frame Plates at side of Rear Axle Housing. Move inner frame forward until there is only 6mm (1/4") movement in the chain between the sprockets. Re-tighten securing bolts, making sure shaft is adjusted evenly at both ends.
9. **To Remove and Replace Drive Cone and Pulley Assembly:** Remove the linkage from the rear of Drive Cone Arm. Loosen lock nuts and set screws on Clutch Discs. Move the Discs as far apart as possible along the shaft. Remove the Pivot bolt at front end of Drive Cone Arm, being careful to keep the V Belt tensioned against the pulley on engine crankshaft. The Arm and Drive Cone Assembly can now be removed through the opening. To remove the Drive Cone Lining and Pulley from the Shaft, remove the shaft lock nut and withdraw the shaft and remove cone and pulley from the housing. The Cone and Pulley can now be separated. Do not attempt to dismantle or assemble this section by hammering otherwise damage to bearings may result.
Reassemble in reverse order to dismantling instructions, renewing any worn parts. Re-adjust Clutch Discs as explained in Section 7.

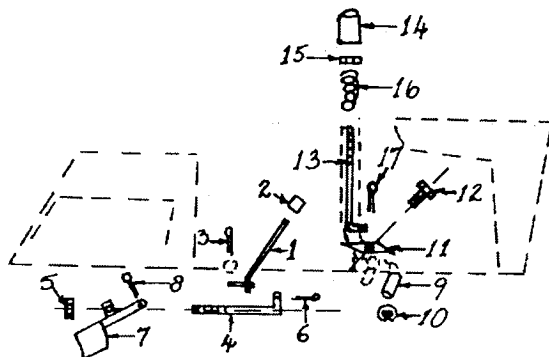
5-78 GROUP 11: CHASSIS & COMPONENTS

RefPart No	Description
1 3002	Engine Mounting Bolt Plate (2) 5HP NLA
3003	Engine Mounting Bolt Plate Short (7HP) NLA
3004	Engine Mtg Bolt Plate Long (7HP) NLA
2 N05C	Engine Mounting Nut (4)
3 W05S	Engine Mounting Bolt S/proof Washer (4)
4 3007	Engine Pulley NLA
5 SS0408W	Engine Pulley Set Screw
6 S152008B6	Engine Pulley & Cutter Disc Key NLA
7 3010	Bonnet NLA
8 3011	Front Bonnet Stay (2) NLA
9 SR0324W	Front Bonnet Bolt (4) NLA
10 W03S	Front Bonnet Shakeproof Washer (4)
11 N03W	Front Bonnet Nut (4)
12 3015	Transmission Cover NLA
13 3016	Transmission Cover Hinge Pin NLA
14 837	Seat Base NLA
AM003	Seat Cover NLA
AM002	Seat Cushion NLA
15 3038	Outer Frame NLA
3039	Inner Frame NLA
16 3040	Rear Axle "U" Bracket L/H NLA
3041	Rear Axle "U" Bracket R/H NLA
17 B0628C	Rear Axle "U" Bracket Mounting Bolt Long
B0616C	Rear Axle "U" Bracket Mtg Bolt Short (3)
18 N06C	Rear Axle "U" Bracket Mounting Nut (4)
19 W0620HD	Rear Axle "U" Bracket Mounting H/D Washer (4)
20 W061216	Rear Axle "U" Bracket Mounting Flat Washer (4)
21 B0540W	Rear Axle "U" Bracket Clamp Bolt NLA
22 N05CN	Rear Axle "U" Bracket Clamp Nyloc Nut
23 3107	Steering Wheel Rubber Grommet NLA
24 AM250/1	Throttle Cable (7HP)
3180	Engine Mounting Plate (7HP) NLA
3181	Exhaust Deflector Plate (7HP) NLA
B0440W	Exhaust Deflector Plate Bolt (7HP) NLA
B0432W	Exhaust Deflector Plate Bolt (7HP) NLA
25 AM088	Throttle Control Lever
26 ST1010	Throttle Control Lever Screw (2)



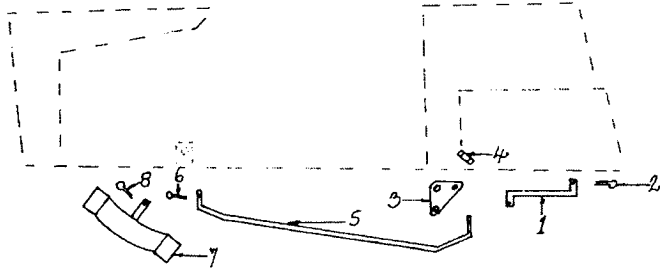
5-78 GROUP 12: RIGHT HAND SIDE OF CHASSIS

RefPart No	Description
1 3122	Hand Brake Lever NLA
2 3123	Hand Brake Lever Knob NLA
3 CP2-520	Hand Brake Lever Split Pin
4 3125	Hand Brake Pull Rod NLA
5 N05CN	Hand Brake Pull Rod Nyloc Nut
6 CP2-520	Hand Brake Pull Rod Split Pin
7 3128	Brake Pad NLA
8 CP3-220	Brake Pad Retaining Split Pin
9 3133A	Height Adjustment Roller (2) NLA
10 3134	Height Adjustment Roller Circlip (4) NLA
11 3137	Height Adjustment Pawl NLA
12 B0508C	Height Adjustment Pivot Bolt
13 3139	Height Adjustment Push Rod NLA
14 AM013Q2	Height Adjustment Push Rod Button
15 N04C	Height Adjustment Push Rod Lock Nut
16 AM012	Height Adjustment Push Rod Spring
17 CP2-520	Height Adjustment Push Rod Split Pin



5-78 GROUP 13: LEFT HAND SIDE OF CHASSIS

RefPart No No	Description
1 3092	Clutch Link Rod Short NLA
2 CP2-520	Clutch Link Rod Split Pin (2)
3 AM008	Clutch Link Rod Pivot Plate NLA
4 N06CN	Clutch Link Rod Nyloc Nut
5 3097	Clutch Link Rod Long NLA
3097/1	Clutch Link Rod Long (7HP) NLA
6 CP2-520	Clutch Link Rod Split Pin (2)
7 3099	Clutch Pedal NLA
8 CP3-225	Clutch Pedal Split Pin
3095	Clutch Pivot Plate Bush NLA



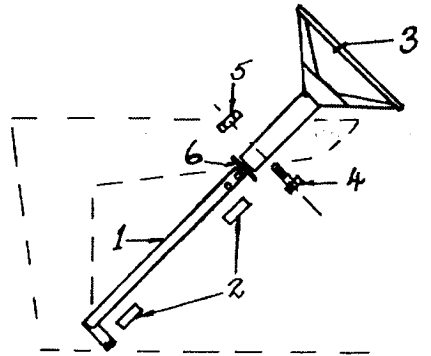
5-78 GROUP 14: ELECTRICAL COMPONENTS

RefPart No No	Description
1 3166	Battery Mounting Plate NLA
2 3167	Battery Strap NLA
3 3168	Battery Clamp Bolts NLA
4 N04C	Battery Clamp Bolt Nut
5 836	Starter Button NLA
6 3171	Starter Button Mounting Bracket NLA
7 3172	Bracket Attachment Screw NLA

****NO DIAGRAM AVAILABLE**

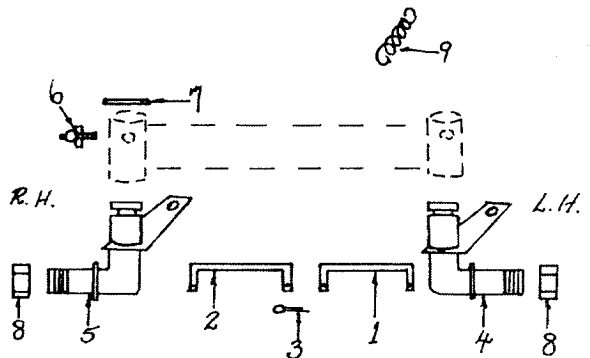
5-78 GROUP 15: STEERING COMPONENTS

RefPart No No	Description
1 3101	Steering Shaft and Pivot Plate NLA
2 AM215	Steering Shaft Bush (2)
3 3103	Steering Wheel NLA
4 B0416C	Steering Wheel Retaining Bolt (2)
5 N04CN	Steering Wheel Retaining Nyloc Nut (2)
6 3106	Steering Wheel Spacer Washer NLA



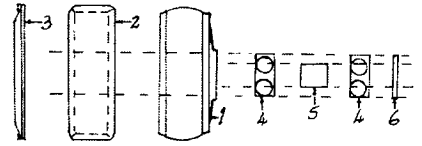
5-78 GROUP 16: FRONT AXLE COMPONENTS

RefPart No No	Description
1 3108	Steering Tie Rod L/H NLA
2 3109	Steering Tie Rod R/H NLA
3 CP2-520	Steering Tie Rod Split Pin (4)
4 3111	Stub Axle Left 3/4" NLA
3111M	Stub Axle Left 20mm NLA
5 3112	Stub Axle Right 3/4" NLA
3112M	Stub Axle Right 20mm NLA
6 GNTF3	Stub Axle Grease Nipple (2)
7 3114	Stub Axle Dust Cap (2) NLA
8 SNT12F	Front Wheel Nut (2)
9 3032	Weight Compensating Spring NLA



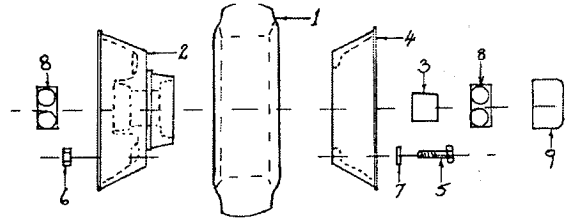
5-78 GROUP 17: FRONT WHEEL COMPONENTS – SOLID TYRE WHEEL

Ref Part No	Description
1 272	Front Wheel (2) ¾" NLA
S151801B6	Front Wheel (2) 20mm
2 3120	Front Wheel Tyre (2) NLA
3 151803B6	Front Wheel Hub Cap (2)
4 BB1226-I	Front Wheel Bearing (4) ¾" NLA
BB204212N	Front Wheel Bearing (4) 20mm
5 AM021	Front Wheel Bearing Spacer(2)
6 3118	Front Wheel Dust Washer NLA



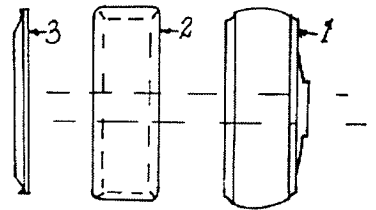
5-78 GROUP 17: FRONT WHEEL COMPONENTS – PNEUMATIC WHEEL

Ref No	Part No	Description
1	TT350x4	Front Wheel Tyre (2)
	STU350x4	Front Wheel Tube (2)
1	3193	Front Wheel Hub (2) ¾" NLA
	3193M	Front Wheel Hub (2) 20mm NLA
3	AM021	Front Wheel Bearing Spacer (2)
4	3196	Front Wheel Rim (2) NLA
5	SR0412W	Front Wheel Screw (8) NLA
6	N04C	Front Wheel Nut (8)
7	W04S	Front Wheel Washer (8)
8	BB1226-I	Front Wheel Bearing (4) ¾" NLA
	BB204212N	Front Wheel Bearing (4) 20mm
9	AM07099C	Front Wheel Hub Cap



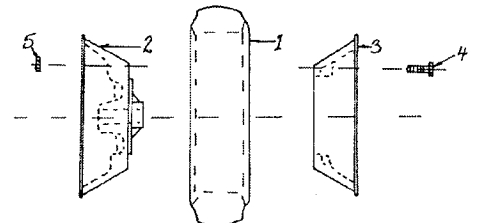
5-78 GROUP 18: REAR WHEEL COMPONENTS – SOLID TYRE WHEEL

Ref No	Part No	Description
1	3055	Rear Wheel R/H NLA
	3056	Rear Wheel L/H NLA
2	S151802B6	Rear Wheel Tyre (2) NLA
3	S151803B6	Rear Wheel Hub Cap (2) NLA



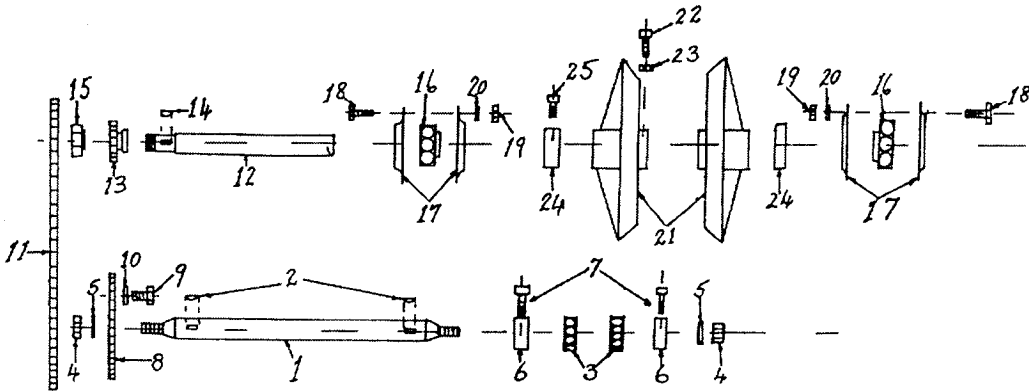
5-78 GROUP 18: REAR WHEEL COMPONENTS – PNEUMATIC WHEEL

Ref No	Part No	Description
1	STY350x5	Rear Wheel Tyre (2) NLA
	STU350x5	Rear Wheel Tube (2) NLA
2	3186	Rear Wheel Hub L/H NLA
	3187	Rear Wheel Hub R/H NLA
3	3186	Rear Wheel Rim (2) NLA
4	B0520C	Rear Wheel Bolt (6)
5	N05C	Rear Wheel Nut (6)



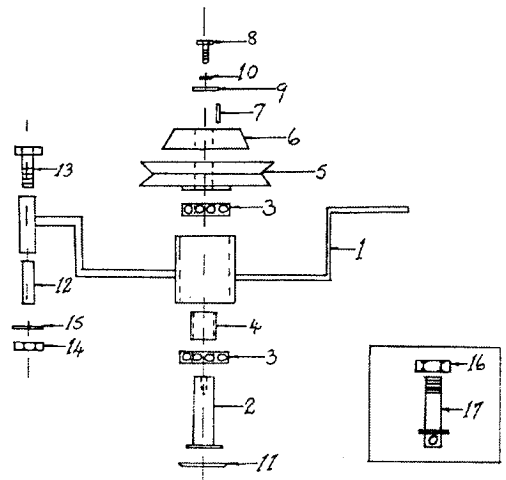
5-78 GROUP 19: DRIVE COMPONENTS

RefPart No	Description	RefPart No	Description
1 3049	Rear Axle NLA	12 914	Intershaft NLA
3049M	Rear Axle (Metric) NLA	13 SKIT30	Intershaft Sprocket & Key
2 SK09	Rear Axle Key (2)	14 SK03	Intershaft Sprocket Key
3 BB1226-I	Rear Axle Bearing (2) NLA	15 SAM022	Intershaft Sprocket Nut
BB204212N	Rear Axle Bearing 20mm (2)	16 BB14SA-I	Intershaft Bearing (2) NLA
4 N08F	Rear Axle Nut (2)	17 AM024	Intershaft Bearing Flange (4)
5 W08S	Rear Axle Shakeproof Washer (2)	18 B0612C	Intershaft Bearing Flange Bolt (6)
6 3054	Rear Axle Shaft Collar 3/4" (2) NLA	19 N06C	Intershaft Bearing Flange Nut (6)
3054M	Rear Axle Shaft Collar 20mm (2) NLA	20 W06S	Intershaft Brg Flange S/p Washer (6)
7 SS0508W	Rear Axle Collar Set Screw (2)	21 021903	Clutch Plate NLA
8 3059	Drive Sprocket NLA	22 SS0612W	Clutch Plate Set Screw (4)
9 SH0516C	Drive Sprocket Retaining Bolt (3) NLA	23 N06C	Clutch Plate Lock Nut
10 W05S	Drive Sprocket Ret S/proof Washer (3)	24 923	Intershaft Lock Collar (2) NLA
11 AM018	Drive Chain	25 SS0508W	Intershaft Lock Collar Set Screw (2)
SAM019	Connecting Link		



5-78 GROUP 20: CLUTCH COMPONENTS

Ref No	Part No	Description
1	3076	Clutch Arm NLA
	3076M	Clutch Arm NLA
2	3077	Clutch Shaft 3/4" NLA
1	BB1226-I	Clutch Shaft Bearing 3/4" (2) NLA
	BB205215N	Clutch Shaft Bearing 20mm (2)
4	AM072	Clutch Shaft Bearing Spacer
5	3080	Clutch Pulley NLA
6	3081	Clutch Cone (5HP) NLA
	3081A	Clutch Cone (7HP) NLA
7	AM026	Clutch Cone Pin
8	B0616F	Clutch Cone Retaining Bolt
9	W0620HD	Clutch Cone Retaining Washer
10	W06S	Clutch Cone Retaining S/proof Washer
11	3086	Clutch Arm Assembly Welsh Plug NLA
12	091203	Clutch Arm Assembly Pivot Bush NLA
13	B0636W	Clutch Arm Assembly Pivot Bolt NLA
14	N06CN	Clutch Arm Assembly Pivot Nyloc Nut
15	W0620HD	Clutch Arm Assy Pivot Bolt H/D Washer
16	SNT12F	Clutch Shaft Nut
17	3077M	Clutch Shaft 20mm NLA



5-78 GROUP 21: CUTTER COMPONENTS

Ref No	Part No	Description
1	3020	Cutter Disc Housing NLA
2	B0512C	Cutter Disc Housing Retaining Bolt (6)
3	N05W	Cutter Disc Housing Retaining Nut (6)
4	W0520HD	Cutter Disc Housing Retaining H/D Washer (6) NLA
5	W05S	Cutter Disc Housing Retaining Shakeproof Washer (6)
6	022107	Cutter Disc NLA
7	B0616F	Cutter Disc Retaining Bolt (5HP)
	B0720F	Cutter Disc Retaining Bolt (7HP)
7	W06S	Cutter Disc Retaining Shakeproof Washer (5HP)
	W07S	Cutter Disc Retaining Shakeproof Washer (7HP)
7	3030	Cutter Disc Blades Straight NLA
	SMB137AHD	Cutter Disc Blades (Catcher) (4)
	SMB137SHD	Cutter Disc Blades (Cutters) (4)
10	SKIT01D1	Cutter Disc Blade Bolt & Nut Set
11	3035	Windrower NLA
12	N05C	Windrower Nut
13	W05S	Windrower Shakeproof Washer
14	3144	Jockey Wheel (2) NLA
15	SAM017	Jockey Wheel Bush (2)
16	3146	Jockey Wheel Axle (2) NLA
17	W091816	Jockey Wheel Axle Washer (2) NLA
18	CP3-220	Jockey Wheel Axle Split Pin (2)
19	N06C	Jockey Wheel Axle Retaining Nut (2)
20	W06S	Jockey Wheel Axle Retaining Shakeproof Washer (2)
21	VA46	Belt NLA

