PARTS LIST AND INSTRUCTIONS

WHEEL HORSE

WHEEL-HORSE PRODUCTS, INC. • SOUTH BEND, IND.

TILLER
MODEL
7-1251

The Model 7-1251 Tiller is designed to fit all 8 Speed and Automatic Tractors (except the 800 and 800 Automatic) which have a 45½ wheel base.

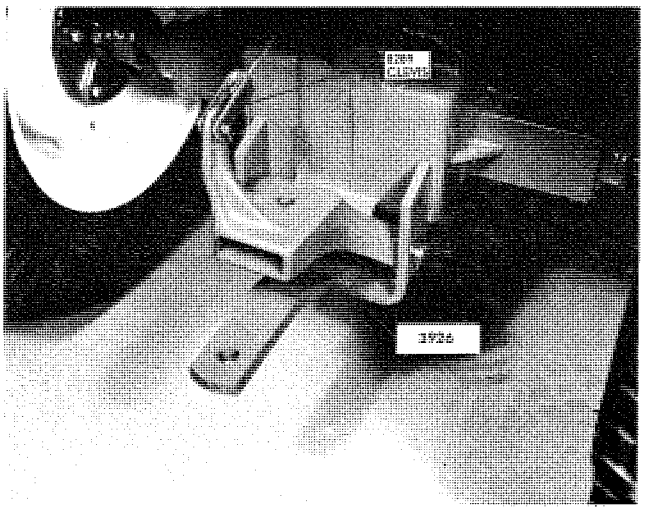
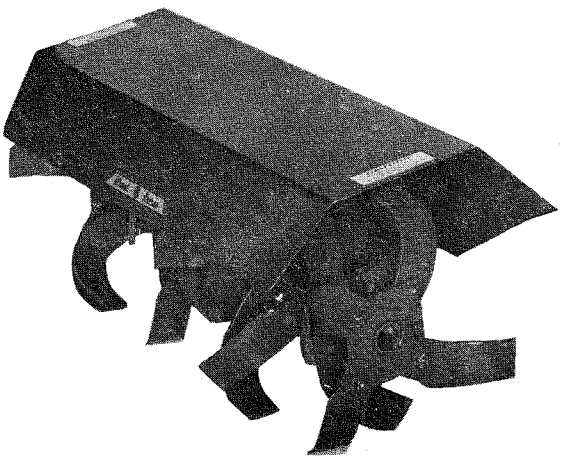


FIGURE 1



If either or both of the hitches shown in Fig. 1 are on the tractor, remove them by removing one of the snap rings from the shaft holding them to the transmission and slide the shaft out. Reinstall the clevis pin in the lift cable for further use.

If there is no lift cable on the tractor, thread the cable, item 44 through the clevis, item 45 and push the cable through the conduit provided on the tractor. Fastening the other end will come later.

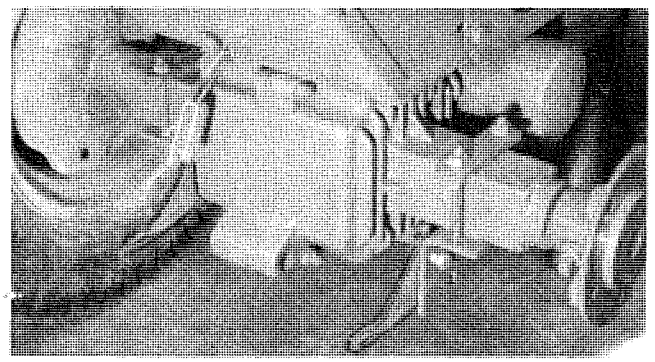


FIGURE 2

Install the rear hitch on the axle as shown in Fig. 2.

Angle Spacers, Part No. 7713 (Item 78) on the exploded view drawing) are used to fill the gap between the bolts and the axle housing. The spacers are not used on the Automatic Transmission type tractors.

Center the hitch bar on the tractor axle and tighten with bolts and links provided.

Open the latch by pulling up. Install the Tiller mounting shaft in the hitch and fasten by pushing down on the latches.

When installing the tiller the right hand axle hitch latch should be opened just far enough for the hitch shaft to enter. In this position the latch handle will be below the idler brace and will not interfere with the installation.

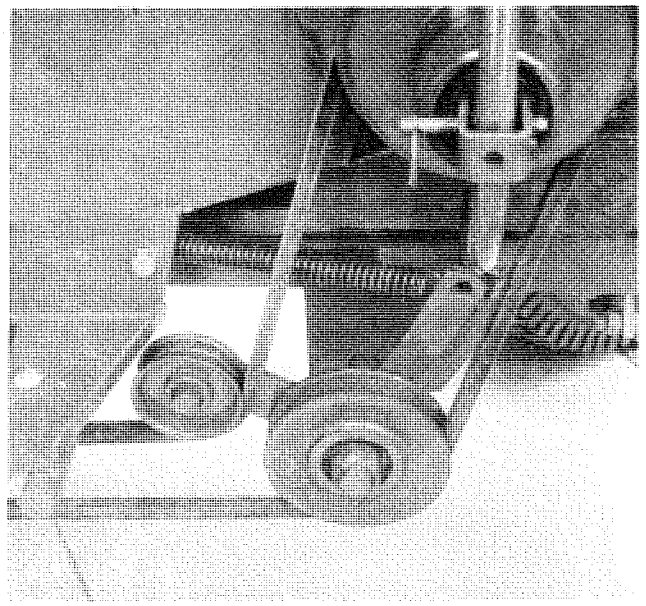


FIGURE 3

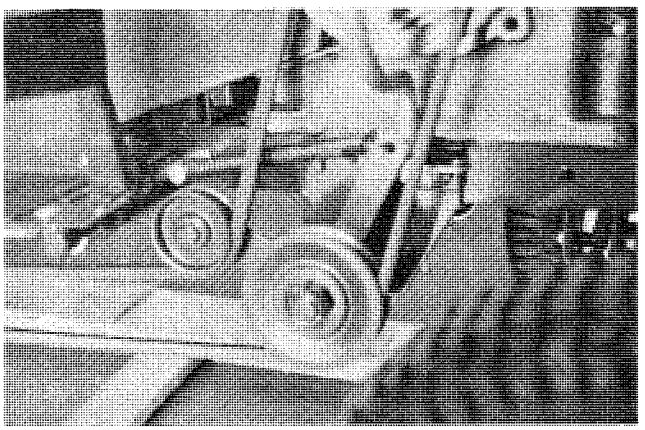


FIGURE 3A

Fasten the rear end of the lift cable to the Tiller as shown in Fig. 6.

Block up the Tiller until it is tight against the transmission case. Insert the thimble into one end of the clevis assembly, item 48 and secure with a clevis pin and cotter. Connect the remaining end of the clevis assembly to the tractor lift arm as shown in Fig. 4.

Wrap the cable around the thimble and remove all slack. Secure with the cable clamps. One clamp directly behind the thimble and the other $\frac{3}{8}$ maximum away as shown in Fig. 4. Cut off excess cable.

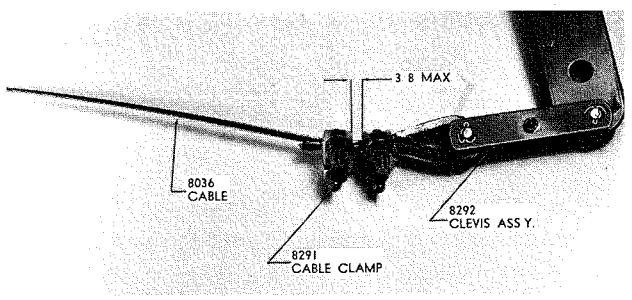


FIGURE 4

Install the idler assembly in the front hitch slots. Make sure the idler shaft is securely placed in the hitch opening and either the plunger or the Hairpin is in place as applicable.

Refer to Fig. 3 and remove the $\frac{5}{16}$-18 x $\frac{1}{2}$ bolt that holds the foot rest to the belt guard and replace it with a $\frac{5}{16}$-18 x 1 bolt, item 85. Place a $\frac{5}{16}$-18 Esloc nut on the end of the bolt leaving room to hook the idler spring over the bolt between the nut and the belt guard.

For newer models, with brake pedal, use $\frac{3}{8}$-16 x $2\frac{3}{4}$ bolt, item 91 and $\frac{3}{8}$-16 nuts. Install in hole in frame in front of pedal. See Fig. 3A.

Connect the idler spring, item 69 between the idler arm and the foot rest bolt.

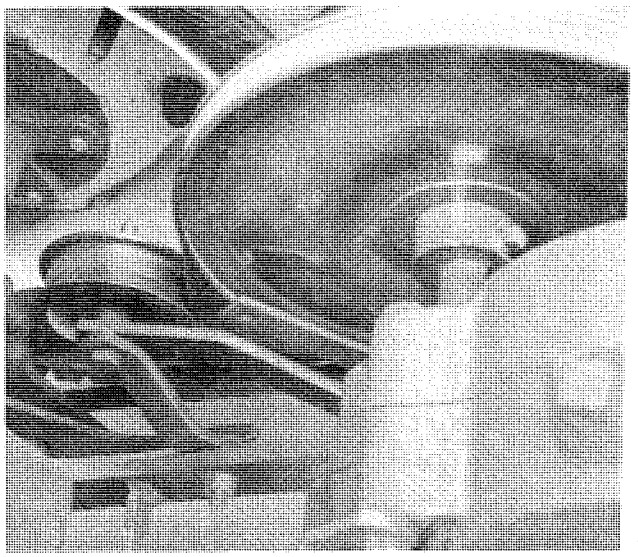


FIGURE 5

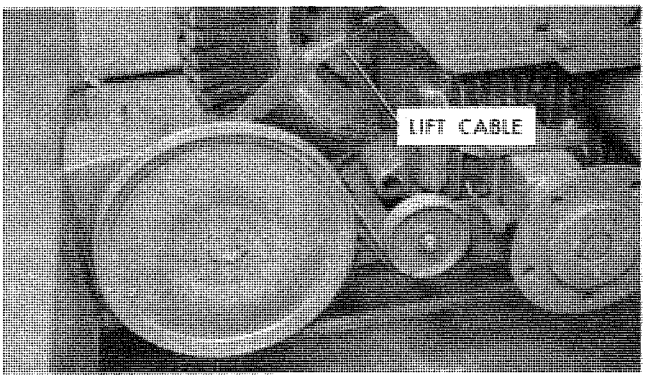


FIGURE 6

Route the belt over the front idlers as shown in Fig. 3, with the belt in the largest diameter engine pulley groove.

Continue the belt beneath the axle and around the pulleys as shown in Fig. 6. Sufficient belt tension will be provided by the spring loaded idler. Shift quick hitch assembly as necessary to align the belt with the inner groove of clutch pulley and tighten quick hitch mounting bolts.

The second hole in the brace between the hitch and the end of the idler arm is provided for long belts and to compensate for belt stretch that may occur over a period of time. See Fig. 5.

OPERATING PROCEDURE

It is recommended that rear wheel weights be used on all tractors. Front wheel weights are also recommended.

Never dismount from tractor without disengaging clutch and setting tractor park brake. Always stop the engine to remove rocks or debris from the tines.

For best performance the tiller should be operated with the engine set at full throttle. The ground speed of the tractor should then be regulated to match soil conditions.

In hard, compacted soils or clay it may be necessary to go slowly in order to obtain soil penetration. Better penetration can be obtained by removing the outer two tines which reduces the tilling width to 30 inches.

For best performance depending on ground cover it may be necessary to till area twice. One operation being 90° to the other if terrain permits or by overlapping.

When tilling in sod or gumbo soils the tiller will have a tendency to push the tractor. Wheel weights will help to counteract this. However, it may also be advisable to control the depth of soil penetration with the Height-A-Matic lift lever or with the hydraulic control attachment.

Do not over-till the soil or pulverize it. Soil tilled too finely will not absorb moisture. It will cause puddling and water run-off. In addition the soil will become compacted more readily.

MAINTENANCE

The gear case is filled with oil at the factory and should not require filling. However, the oil level should be checked before using tiller and periodically afterwards. To check oil level the tiller should be on the tractor with the tines touching the ground. Remove the pipe plug on the bottom of the gear case. If oil runs from this hole then the oil is at its proper level. General purpose transmission type SAE 90 weight oil is used. When storing the unit for a long period of time, smear a light coat of grease on the tines to prevent rust.

SPECIFICATIONS

WIDTH OF CUT: 36" standard. 30" optional by removing outer tines.

ROTOR TINE DIAMETER: 13½".

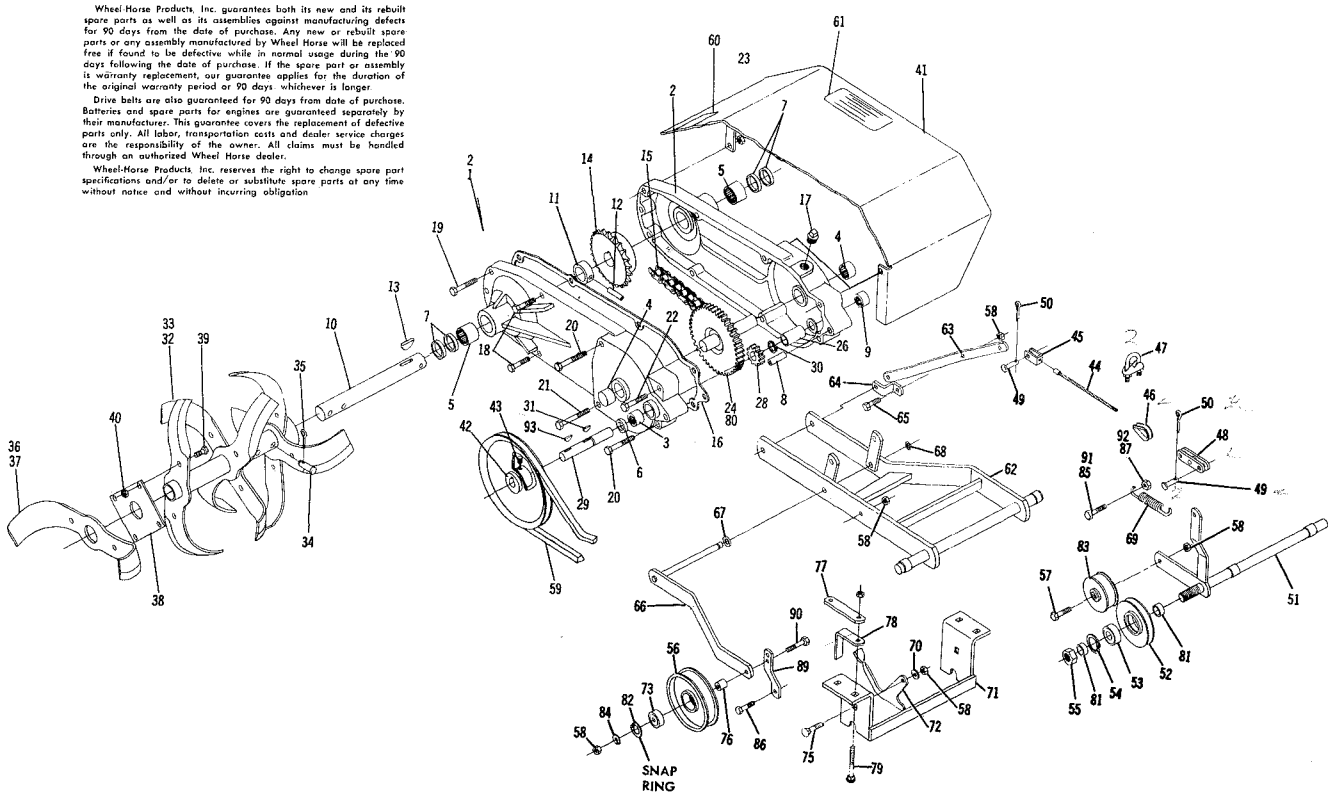
OUTPUT SHAFT: 1¼" diameter heat-treated and ground shaft.

MAXIMUM DEPTH OF CUT: 6" to 8".

WEIGHT: 150 lbs.

GEAR BOX LUBRICANT: SAE 90 gear lube, 1½ pints.

TINE ASSEMBLY: Right and left-hand assemblies, each with 6 one-piece, heat-treated tines. 12 cutting edges per side; 24 total cutting edges.



PARTS LIST

Parts available only through Authorized Dealers.
When ordering parts always list Part No. and name of Part.
(Specifications subject to change without notice.)

Item No.	Part No.	Description	No. Req'd.
1	6835	Ass'y Gear Case Complete	1
2	6837	Case — R.H.	2
3	1540	Bearing — Needle ¾ ID x ½	1
4	1532	Bearing — Needle 1" ID x ¾	2
5	6838	Bearing — Needle 1¼ ID x 1	2
6	100441	Seal ¾ ID	1
7	103118	Seal 1¼ ID	2
8	933242	Roll Pin ⅜ x 1	4
9	1529	Bearing — Needle ¾ ID x ¾	1
10	6842	Shaft — Tine	1
11	6843	Spacer	1
12	933232	Roll Pin 5/16 x 2	1
13	937058	Key #128 Woodruff	1
14	6845	Sprocket 20T	1
15	6848	Chain	1
16	6851	Gasket	1
17	943421	Plug — ½-14 Pipe	2
18	908040-4	Bolt — ⅜-16 x 2½	4
19	908042-4	Bolt — Hex ⅜-16 x 3	1
20	908144-4	Bolt — Hex ⅜-16 x 4½	2
21	908149-4	Bolt — Hex ⅜-16 x 5½	1
22	908044-4	Bolt — Hex ⅜-16 x 4	1
23	915663-4	Nut — Elastic Stop ⅜-16	11
24	6895	Assembly — Gear & Sprocket	1
25	6898	Shaft	1
26	6963	Spacer	1
27	1535	Washer — Thrust	1
28	3528	Gear — Pinion	1
29	104387	Shaft — Input	1
30	936125	Snapring — ¾ Shaft	1
31	937014	Key — #9 Woodruff	1
32	9204	Tine Assembly R.H.	1
33	9205	Tine Assembly L.H.	1
34	9208	Pin — Clevis	4
35	932017-4	Cotter Pin ⅛ x 1	4
36	9206	Tine — R.H.	1
37	9207	Tine — L.H.	1
38	9203	Plate — Tine Mounting	2
39	908046-4	Bolt — Hex 7/16-14 x 1	8
40	915114-6	Nut — Nylok 7/16-14	8
41	6874	Assembly Tine Shield	1
42	6844	Pulley	1
43	7977	Set Screw 5/16-18 x ½ Sq. Hd.	2
44	8036	Lift Cable	1
45	8289	Clevis	1
46	8290	Thimble	1
47	8291	Cable Clamp	2
48	8292	Clevis	1
49	932120-4	Clevis Pin	3
50	932000-4	Cotter Pin .06 x .50	3
51	104089	Front Idler	1
52	104143	Pulley — Idler	1
53	104070	Bearing	1
54	936028	Snap Ring	1
55	915640-4	Nut — Hex ¾-16 Jam E.S.	1
56	6740	Pulley — Flat Idler	1
57	908036-4	Bolt — Hex ⅜-16 x 1½	1
58	915113-6	Nut — Eslok ⅜-16	9
59	1599	Belt	1
60	103174	Decal — Wheel Horse	1
61	4498	Decal — Caution	2
62	103629	Hitch	1
63	103606	Arm — Lift	1
64	103607	Brace — Lift	1
65	908033-4	Bolt — Hex ⅜-16 x ⅞	1
66	103632	Idler Arm	1
67	920011-4	Washer — ½ SAE	1
68	5701	"E" — Ring — ½" Shaft	1
69	6135	Spring	1
70	920009-4	Washer — ⅜ SAE	5
71	7710	Hitch Axle Mounting	1
72	7704	Latch Hitch	2
73	4567	Bearing	1
74	103966	Belt Guide	1
75	908035-4	Bolt — Hex ⅜-16 x 1¼	4
76	9140	Spacer	2
77	7711	Link	2
78	7713	Spacer — Axle	2
79	900073-4	Bolt — Carr. ⅜-16 x 3½	4
80	6894	Sprocket & Shaft Ass'y	1
81	7038	Spacer	2
82	936024	Snap Ring 1⅜ Bore	1
83	MW8841	Pulley — Flat Idler	1
84	920083-4	Lockwasher ⅜	2
85	960179-4	Bolt — Flg. 5/16-18 x 1	1
86	900063-4	Bolt — Car. ⅜-16 x 1	2
87	915112-6	Nut — Hex 5/16-18	1
88	7264	Spring — Valve	1
89	104098	Brace — Idler	1
90	908038-4	Bolt — Hex ⅜-16 x 2	1
91	908041-4	Bolt — ⅜-16 x 2¾	1
92	915113-4	Nut — Hex ⅜-16	2
93	1005	Key — Square	1
93	937159	Key — Hi Pro	1

Wheel Horse Service Bulletins 1961 - 1990: **#143** Issued: March 1973

Model 7-1251 Tiller - Brace Installed Incorrectly

Previous *Table of Contents* *Next*

ALL DISTRIBUTORS/DEALERS:

1. Problem:

1.1 Part 103607, brace, installed incorrectly as shown in drawing causing brace to bend. (Fig. A)

2. Solution:

2.1 Remove bolt that fastens 103607 to 103606 lift arm and reinstall as shown in drawing (Fig, B).

2.2 Offset hole must bolt to casting (Fig, C).

3. Problem:

3.1 There is a possibility that the left-hand fork (V-notch) on the front idler shaft assembly, part 103613, is not welded in proper position. This fork (V-notch) is used with hairpin type latch lock. (See Fig. 5 in parts list and instructions.)

4. Solution:

4.1 Replace part 103613.

4.2 Order part from your distributor.

5. Reimbursement:

5.1 File a standard warranty claim direct with us here in South Bend. our standard procedure.

5.2 Operation number on claim, 63000-A.

5.3 Labor allowance 1/2 hour - $3,25.

6. We appreciate your cooperation.

Wheel Horse Service Bulletins 1961 - 1990: **#145** Issued: May 1973

Model 7-1251 Tiller - Drive Belt - Axle Contact

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ALL DISTRIBUTORS/DEALERS:

1. Problem:

1.1 Drive belt, #1599, does not clear rear axle and to correct any misalignment in idler pulleys.

2. Solution (Field):

2.1 Install new #101540 idler service assembly.

3. Parts included in #101540:

```
3.1  1 of 104089, front idler assy. 1 of 915113, nut
     1 of MW-8821, idler pulley 1 of 960179, bolt
     1 of 104098, idler brace 1 of 908035, bolt
     1 of 6135, idler spring 1 of 908039, bolt
     1 of 915112, nut
```

4. Installation instructions:

4.1 Remove the V idler pulley #10176i and spacer #7038 from the original hitch shaft #103613 and discard the hitch shaft and flat idler assembly.

4.2 Install the V idler #101763 and spacers on the new idler shaft assembly #104089 as shown in Fig. 1.

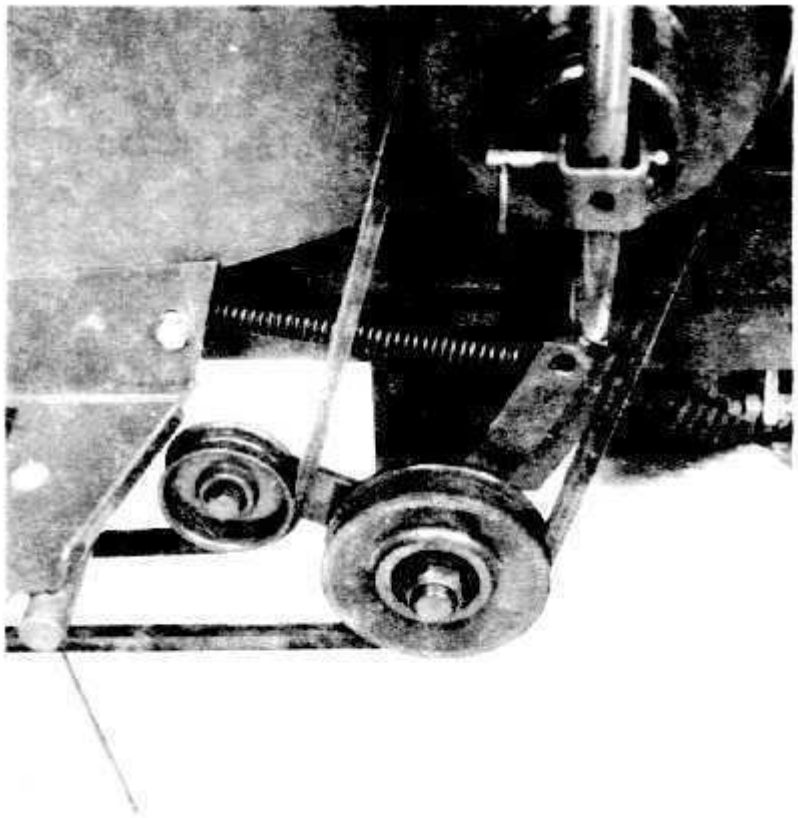

FIG. 1

4.3 Install the new flat stamped idler pulley #MW-8821 on the idler arm as shown in Fig. 1 using the 3/8" bolt and nut that held the original #6740 pulley in place.

4.4 Install the new hitch shaft and pulley assembly in the mid hitch as shown in Fig. 1.

4.5 Refer to Fig. 1 and remove the 5/16-18x2 front foot rest to belt guard whizlock bolt and replace it with the 5/16-18x1 Whizlock bolt furnished. Place a 5/16-18 Eslock nut on the end of the bole leaving room to hook the idler spring over the bolt between the nut and the belt guard.

4.6 Connect the new #6135 idler spring as shown in Fig. 1 between the idler arm and the foot rest bolt.

4.7 Remove and discard the original rear idler spring #9177.

4.8 Remove the #6740 pulley and spacer from the rear idler bracket.

4.9 Refer to Fig. 2 and install the new brace #104098 between the tiller hitch #103629 and the end of the original idler arm #103632. Install the bolt in the end hole of the brace with the nut on the inside next to the hitch. (The second hole is provided for additional adjustment if required for long belts and to compensate for belt stretch that may occur over a period of time.)

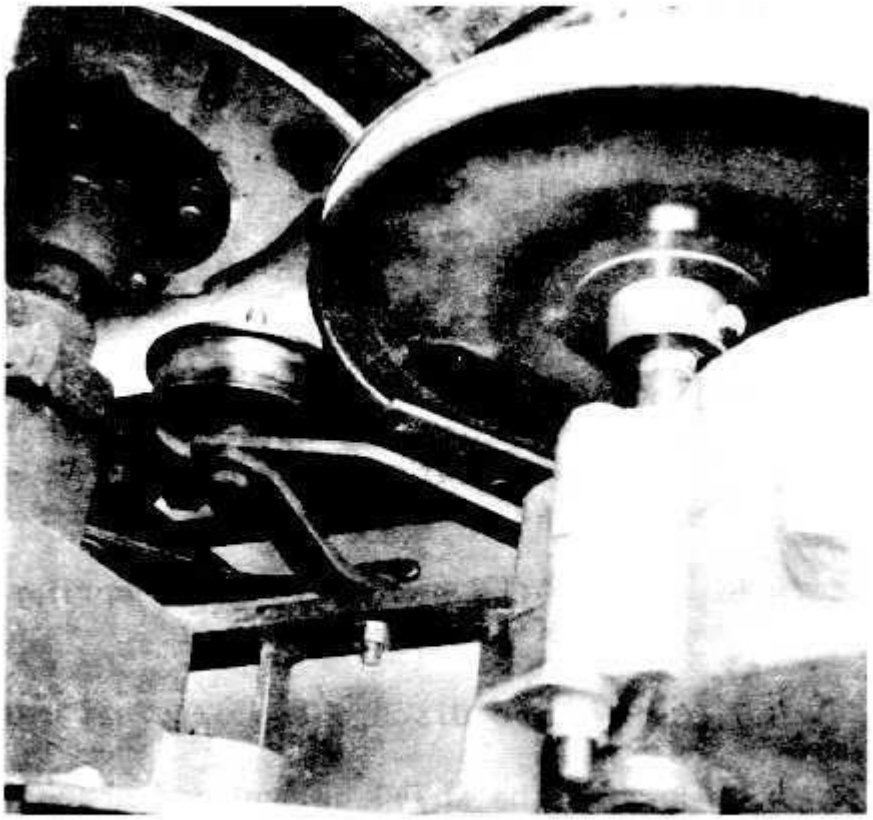

FIG. 2

4.10 Refer to Fig. 2 and reinstall the #6740 flat idler and spacer using the 3/8-16x2" bolt through the brace and idler arm with a spacer on the inside of the pulley and the nut on the outside.

4.11 Install the belt starting at the front, placing it over the PTO pulley and front idlers, under the rear flat idler and over the large tiller pulley, turning the pulley counterclockwise as required.

4.12 Check the belt alignment and test operation. If the rear idler bracket does not align properly, reform as required for proper belt alignment.

4.13 When installing the tiller the right hand axle hitch latch should be opened just far enough for the hitch shaft to enter. In this position the latch handle will be below the new idler brace and will not interfere with the installation.

5. Order #101540 idler service assembly from your distributor.

6. Reimbursement:

6.1 File a standard warranty form for both parts and labor directly with us here in South Bend, our standard procedure.

6.2 Operation number 63001.

6.3 Labor allowance 1 hour - $ 6.50.

Wheel Horse Service Bulletins 1989 - 1990: **T Series #T10** Issued: July 1990

Slot & Clevis Hitch Conversions, 36" Tiller Conversions

Previous *Table of Contents* *Next*

TO ALL DEALERS:

1. Subject

1.1 The following table summarizes all backfit/conversion information applying to the slot and clevis hitch and the 36" tiller. This equipment is used on:

1969-73 Long Frame Tractors

1974-77 B and C-Series Tractors

1978 and Later C,GT,3/4/500-Series

1.2 This information is most often useful when a customer purchases a new tractor and wishes to keep the original older hitch or 36" tiller. (Tiller 07-36TL02 and later fit 1978 and later tractors with no added parts or alterations required.)

2. Service Action

2.1 To use the table properly it is essential that you know the EXACT 8-Series number or VIN of the hitch or tiller and the correct model year of the tractor.

3. Installation Information/Original Service Bulletin Reference

S/A 105104 - Instructions with S/A; Original Bulletin #179A

S/A 105105 - Instructions with S/A; Original Bulletin #180A

S/A 105111 - Instructions with S/A; Original Bulletin #180A

S/A 105112 - Instructions with S/A; Original Bulletin #179A

S/A 105162 - Instructions on Original Bulletin #220

S/A 106629 - Instructions with S/A; Original Bulletin #220

ROUTING	SERVICE MANAGER	SALES MANAGER	PARTS MANAGER	CHIEF MECHANIC	MECHANIC NO 1	MECHANIC NO 2	MECHANIC NO 3	MECHANIC NO 4	RETURN THIS TO
INITIAL HERE									

>

OBTAIN THE INDICATED SERVICE ASSEMBLY/PARTS TO INSTALL IT ON A:

WHEN YOU HAVE A	1969-75 TRACTOR	1976-77 TRACTOR	1978 and LATER TRACTOR
CLEVIS HITCH:			
8-5511	*	S/A 105112	N/A
8-5512	S/A 105104	*	S/A 106629, Note 1
8-5513	S/A 105104	*	S/A 106629, Note 1
8-5514	S/A 105104	S/A 105162	*, Note 1
8-5515	S/A 105104	S/A 105162	*
SLOT HITCH:			
8-5521	*	S/A 105112	N/A
8-5522	S/A 105104	*	S/A 106629, Note 1
8-5523	S/A 105104	*	S/A 106629, Note 1
8-5524	S/A 105104	S/A 105162	*, Note 1
8-5525	S/A 105104	S/A 105162	*
TILLER:			
7-1251	Note 2	Note 2	Note 2
7-1252	*	S/A 105111	S/A 106629, Note 3
67-36TLO1	S/A 105105	*	S/A 106629, Note 1, 4, 5 ..
77-36TL01, 02	S/A 105105	*	S/A 106629, Note 1, 4, 5
87-36TL01	S/A 105105	S/A 105162	*, Note 1, 4, 5
97-36TL01	S/A 105105	S/A 105162	*, Note 1, 4, 5
07-36TL01	S/A 105105	S/A 105162	*, Note 1, 4, 5

* Indicates original application; fits "as supplied", unless otherwise noted.

NOTES

1. Automatic tractors with an "E" in the VIN (Eaton Hydrostatic Transmission) also require 108144 Lift Cable and 108143 Clevis.

2. Check that tiller has been updated according to Service Bulletin #145, then follow 7-1252 information. If brace on tiller frame prevents raising tiller, cut brace out and re-weld lower on frame.

3. The following parts are also required, as applicable. Figure 1 shows the hole locations for mounting the lift plate. The lift plate is installed so the lift chain hole is down (closest to gearcase).

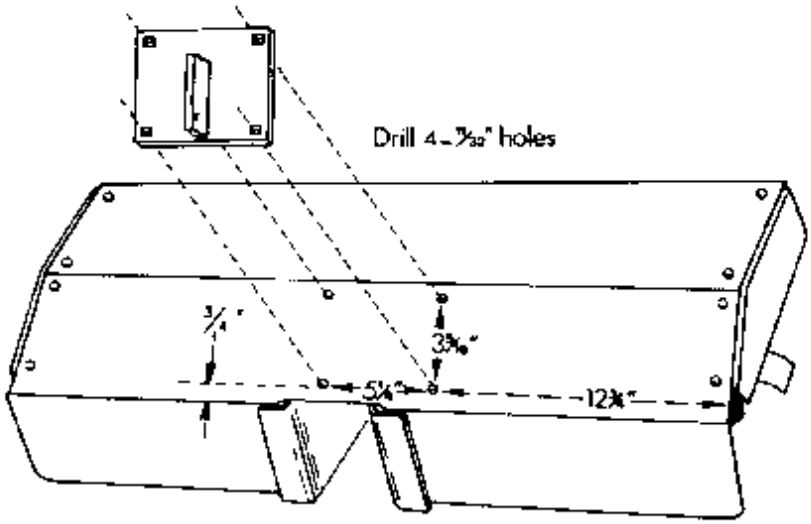

Figure 1. Lift Plate Holes, 7-1252 Modification

All Models

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1278 (2) Shim Washer
5210 (2) Shim Washer
5618 (2) E-Ring
6254 (2) Bushing
104524 (1) Trunnion
105820 (1) Clevis
105821 (1) Clevis Pin
108144 (1) Lift Cable
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810191 (1) Tiller Owner's Manual
(Disregard Belt Guard Instructions,
 Fig. 23)
900037 (4) Carriage Bolt 5/16-18 x 3/4
915112 (4) Eslok Nut 5/16-18
920009 (1) Washer 3/8 SAE
932000 (1) Cotter Pin 1/16 x 1/2
932120 (1) Clevis Pin
933504 (2) Hairpin Cotter
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8-Speed and Sundstr and Auto. Only

108145 (1) Clevis, Short

Eaton Auto. Only

108143 (1) Clevis, Long

Twin Cylinder Models

103635 (1) Drive Belt

4. Twin cylinder models require drive belt 103635.

5. Automatic tractors with Eaton hydrostatic transmission: if the LH (right angle) bracket on the rear hitch interferes with the oil filter, replace it with 108485 bracket. The original bracket can also be modified by cutting off material as required'to eliminate the interference. The lift assist spring is not used in this case.

Toro Service Bulletins 1991 - Present: **Garden Tractors #14** Issued: July 1993

Toro Wheel Horse "T" Bulletins

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PRODUCT: Garden Tractors

SUBJECT: Service Bulletin Information

SITUATION: Some Toro Wheel Horse Service Bulletins issued during the 1990 model year ("T" prefix bulletins) are applicable to 1991 and later products. For ease in identifying and finding this information, a listing of product, subject matter and bulletin number follows. In addition to the paper copies, "T" prefix service bulletins are contained on Wheel Horse fiche card Orange 10.1, dated 5-93.

Product	Subject	Bulletin *
3/4/500-Series	Engine Oil & Fuel Recommendations	T7
3/4/500-Series	Servicing New Batteries/Front Wheel Bearing Lubrication	T8
3/4/500-Series	Guidelines for Fluid-filled Tires	T9
3/4/500-Series	Installing Older 36" Tillers or Slot and Clevis Hitches on Newer Tractors -NOTE- 1992 and later tractors also require Clamp P/N 108903 and Lift Tube P/N 105845 (8-Speed) or P/N 108315 (Hydro) in addition to parts called for in bulletin.	T10
3/4/500-Series	Eaton Hydrostatic Transaxle Ident.	T11
3/4/500-Series	Use of Loctite on Setscrews	T12
3/4/500-Series	Kohler, Toro Power Plus Regulator Rectifier Troubleshooting	T13
3/4/500-Series	Product Selection Basis	T15
3/4/500-Series	Voltmeter and Indicator Light Circuit Board Electrical Precaution	T16
Product	Subject	Bulletin *
3/400-Series	Oil Level Sensor Switch Servicing, Kohler Single Cylinder Engine	T17
3/400-Series	8-Speed Clutch Idler Dampener Adjustment (Applies to 1 991 Single Cylinder Tractors)	T18
500-Series	Front Wheel Bearing Grease Seal	T19
3/4/500-Series	Replacing Transmission Mounting Plate	T20

3/400-Series	Spark Plug Maintenance, Kohler Engines	T31
3/4/500-Series	Replacement Steering Wheel Insert	T33

*These bulletins are located on Wheel Horse fiche card Orange 10.1,dated 5-93.