

SECTION

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**SERVICING THE
FRONT AXLES**

TABLE of CONTENTS

INTRODUCTION	OO-3
FRONT AXLE - 10 HORSEPOWER TRACTOR	OO-4
FRONT AXLE - 12 HORSEPOWER TRACTOR	OO-5
TOE-IN ADJUSTMENT	OO-6

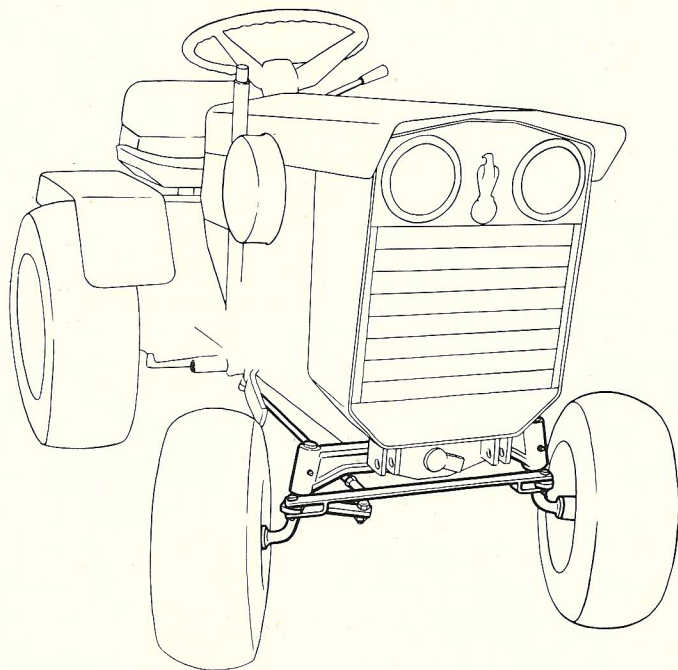
INTRODUCTION

Two types of front axle assemblies are used on the compact tractors. Both types are easily serviced and readily identified.

Before performing any service operations determine if you have a ten horse power tractor or a twelve horse power tractor.

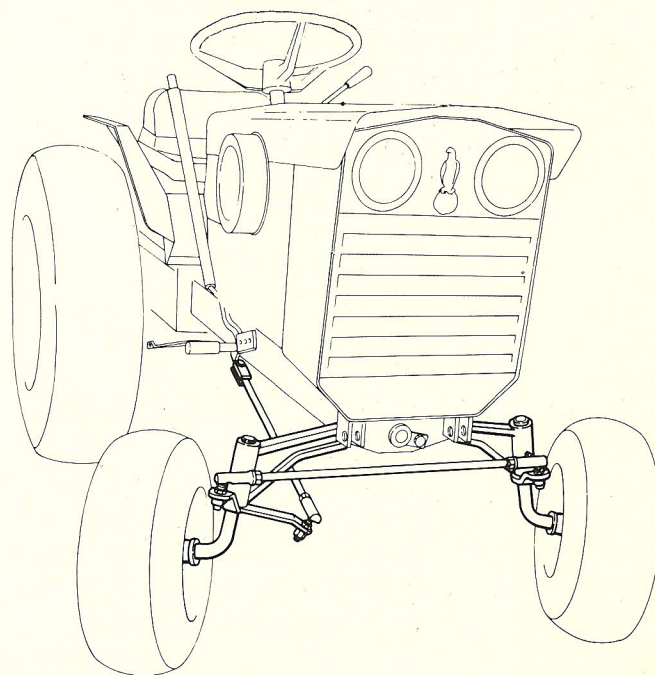
Service procedures for ten horse power tractor are found on Page OO-4 and the twelve horse power model is covered on Page OO-5.

Refer to the operator's manual for proper lubrication instructions and intervals.



10 HORSE POWER TRACTOR

12 HORSE POWER TRACTOR



FRONT AXLE

10 H.P.

Removal and Disassembly

1. Remove cotter pin (18), clevis pin (19) nut (10) and lift off the drag link assembly. If necessary, turn off the ball joint (11) counting the number of turns or marking the drag link rod (20) to facilitate accurate assembly.
2. Block up the front of the tractor.
3. Remove dust cover (16), retaining ring (17) outer bearing (15), wheel (14) and inner

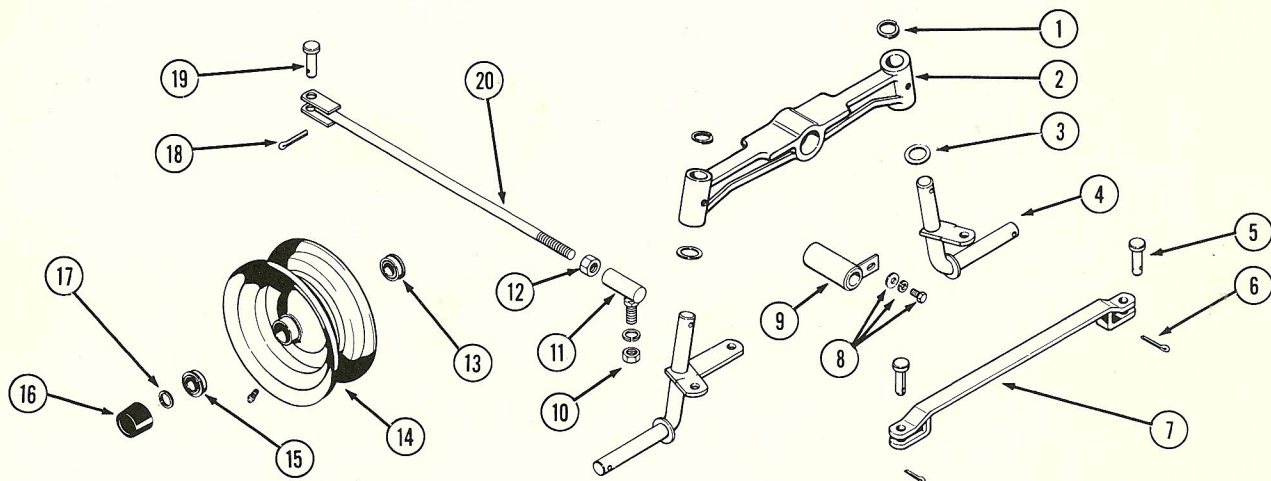
bearing (13).

4. Remove cotter pins (6), clevis pins (5) and lift off the tie rod (7).
5. Remove spindle retaining rings (1), spindles (4) and washers (3).
6. Remove bolt, lockwasher and plain washer (8) and tap out the axle pivot pin (9). Lower the front axle (2).

Inspection

With the axle completely removed and disassembled, the component parts can easily be cleaned and inspected for wear, cracks or burrs. All parts that are worn or damaged must be replaced.

The wheel bearings must be inspected for cracks and excessive wear. Insert the spindle in the wheel and check for excessive side clearance. Check the fit of the king pin in the front axle. Replace all worn parts.



1. Position the axle (2) and install the axle pivot pin (9) using bolt (8) with lockwasher and plain washer to secure the axle.
2. Position washers (3) and install spindles (4) securing with spindle retaining rings (1).
3. Position the tie rod (7) and secure it with clevis pins (5) and cotter pins (6).
4. Install wheel bearings (13 and 15) and pos-

ition the wheels (14) securing them with retaining rings (17). Refer to the operator's manual for proper lubrication.

5. Install the dust cover (16).
6. Assemble the drag link rod (20) and secure it with clevis pin (19), cotter pin (18) and nut (10).

FRONT AXLE 12 H.P. Removal and Disassembly

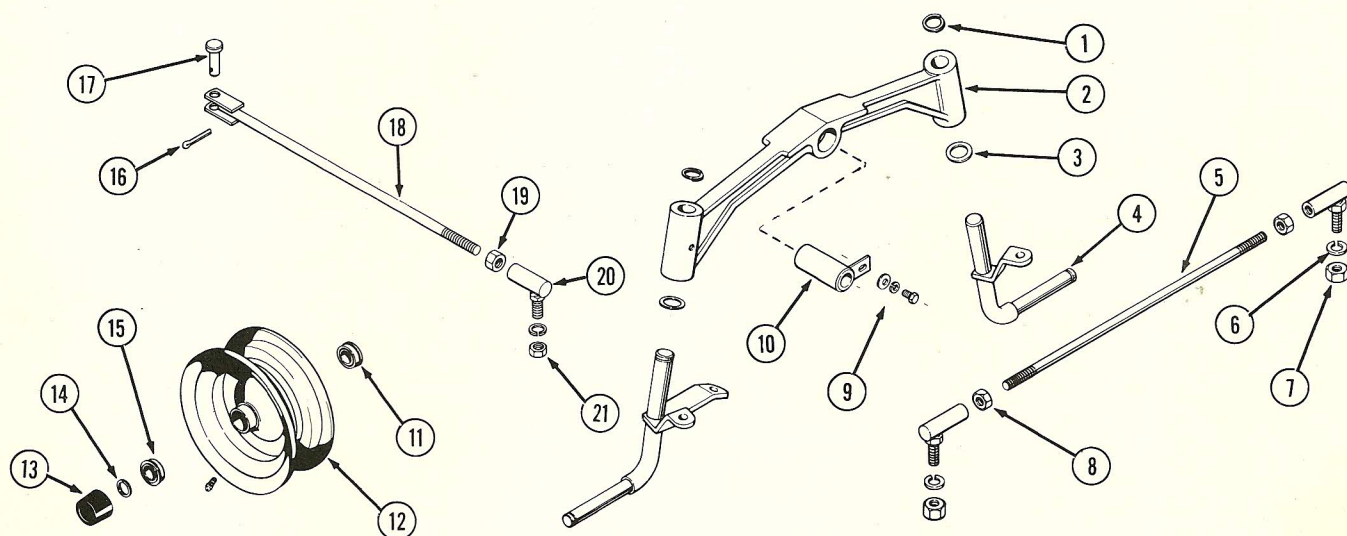
1. Remove cotter pin (16), clevis pin (17), nut (21) and lift out the drag linkage. If necessary, remove the ball joint (20) with locking nut (19). Count the number of turns or mark the drag link rod (18) to insure proper reassembly.
2. Block up the front of the tractor.
3. Remove dust cover (13), retaining ring (14), outer bearing (15), wheel (12) and inner bearing (11) with washer.

4. Remove nuts (7) with washers (6) and lift off the tie rod (5). If necessary, remove ball joints following the same procedures outlined in step 1 above.
5. Remove spindle retaining rings (1), spindles (4) and washers (3).
6. Remove nut, lockwasher and plain washer (9) and tap out the axle pivot pin (10). Lower the front axle (2).

Inspection

With the axle completely removed and disassembled, the component parts can easily be cleaned and inspected for wear, cracks, or burrs. All parts that are worn or damaged must be replaced.

The wheel bearings must be inspected for cracks and excessive wear. Insert the spindle in the wheel and check for excessive side clearance. Check the fit of the king pin in the front axle. Replace all worn parts.



Assembly and Installation

1. Position the axle (2) and install the axle pivot pin (10) and securing bolt (9) with lockwasher and plain washer (9).
2. Position washers (3) and install spindles (4) securing with spindle retaining rings (1).
3. Reassemble the tie rod (5) and position and secure it with lockwashers (6) and nuts (7).
4. Install wheel bearings (15 and 11) and

position the wheels (12) securing them with retaining rings (14). Refer to the operators manual for proper lubrication.

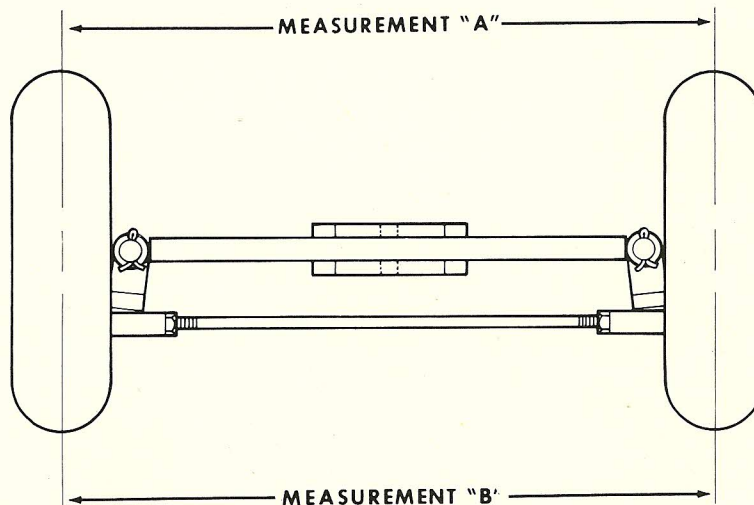
5. Install the dust cover (13).
6. Reassemble the drag link rod (18) and secure with clevis pin (17), cotter pin (16), nut (21) and lockwasher.
7. Refer to Page OO-6 for toe-in adjustment.

FRONT WHEEL TOE-IN

Measuring Toe-In

1. Locate the tractor on a hard level surface preferably concrete. Place the front wheels in a straight ahead position.
2. Make sure the front tire pressures are equal.
3. Starting at the front or leading edge of the front wheels, place a chalk mark on each tire center line in line with the spindle. Do the same at the rear or trailing edge of each front wheel.
4. Measure the distance between the tire center lines at the chalk marks.

THE DISTANCE BETWEEN MEASUREMENT "A" MUST BE $\frac{1}{8}$ TO $\frac{3}{8}$ INCH LESS THAN MEASUREMENT "B". BOTH MEASUREMENTS - FRONT AND REAR MUST BE TAKEN FROM THE SAME HEIGHT ABOVE THE FLOOR.



Toe-In Adjustment

1. Loosen both tie rod ball joints.
2. Turn both ball joints on or off the tie rod an equal amount. Retighten the ball joints when correct toe-in is obtained. Turning the ball joints on the tie rod increases the toe-in. Turning the ball joints off the tie rod decreases the toe in.

NOTE: The J. I. Case Company reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.