



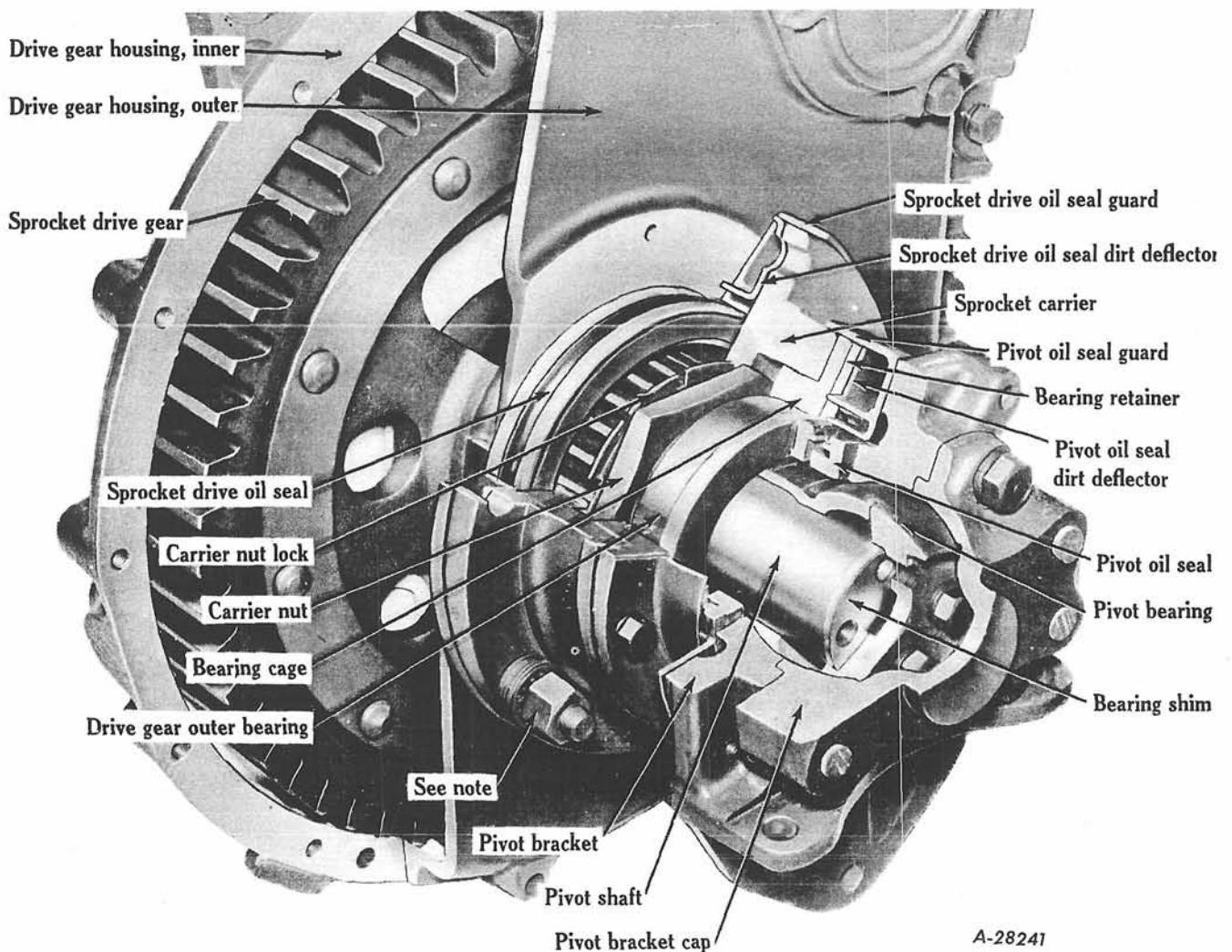
1. DESCRIPTION

The sprocket and sprocket drive assembly consists of a set of spur gears located in separate gear cases, one on each side at the rear of the tractor. Engine power is transmitted from the bevel drive gear through the steering clutches to the sprocket drives. The sprockets, which are attached to the sprocket drive gears, transmit power to the tracks.

Each sprocket drive consists mainly of a sprocket drive pinion, driven by a splined shaft (extending from the steering clutch), and a large sprocket drive gear (driven by the pinion) which, in turn, drives the sprocket. The

sprocket drives are completely enclosed in a gasket sealed compartment between the sprocket drive inner housing (or the sprocket drive carrier, on wide tread tractors) and the sprocket drive outer housing. The bearings are sealed with labyrinth bracket seals and two self adjusting, floating, diaphragm type seals.

The hub or sprocket carrier of each sprocket is splined to the hub of the sprocket drive gear and rotates on a ball bearing pressed on the track frame pivot shaft. Sprockets are reversible; they can be removed from their carriers, reversed, and placed on the same side of the tractor again. This makes it possible to use both sides of the sprocket teeth.



Illust. 1 - Cutaway View of Sprocket Drive.

NOTE: The sprocket is not shown above; if it were shown, it would be assembled under the nut indicated, against the sprocket carrier.



2. SPECIFICATIONS

	"6" Series (61 and 62)	"9" Series (91 and 92)
Number of teeth:		
Sprocket	25	27
Sprocket drive pinion	12	12
Sprocket drive gear	51	57
Output reduction	4.25 to 1	4.75 to 1
Tooth thickness at pitch circle (inches):		
Sprocket drive pinion5164 - .5189	.5947 - .5972
Sprocket drive gear3134 - .3158	.3610 - .3635
Backlash (inches)013 - .018	.015 - .020
Bearings:		
Sprocket drive pinion shaft, inner	roller	- - - -
Sprocket drive pinion shaft, outer	roller	- - - -
Sprocket drive pinion, inner	- - - -	ball
Sprocket drive pinion, outer	- - - -	ball
Steering clutch support (wide tread)	ball	ball
Sprocket drive gear, inner	roller	roller
Sprocket drive gear, outer	ball	ball
SPECIAL TORQUES * (Foot Pounds)		
Sprocket drive gear carrier nut	630-700	630 - 700
Sprocket drive pinion bearing nuts	50 - 60	- - - -
Sprocket drive pinion inner bearing nut	175-200	- - - -
Sprocket drive pinion bearing retainer cap screws	- - - -	56 - 63
Sprocket drive pinion shaft bearing nuts (wide tread)	280-320	280 - 320
Sprocket carrier (hub) bolt nuts	125-140	170 - 190
Pivot bracket bolts, top	130-145	250 - 290
Pivot bracket bolts, side	250-290	280 - 320

* All threads to be lubricated with SAE-30 engine oil.

3. CHECKING MECHANICAL PROBLEMS

PROBABLE CAUSE

REMEDY

SPROCKET DRIVES OVERHEATING

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|--|---|
| 1. Improper or insufficient lubrication. | Use proper grade and amount of lubricant. Check for leaks. |
| 2. Bearing seizure | Remove the sprocket drive and inspect for damaged bearings. Replace if necessary. |

SPROCKET DRIVE GEAR NOISY

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|---|---|
| 1. Misaligned or damaged gears | Inspect the gears and replace if necessary. |
| 2. Improper, dirty or insufficient lubricant. . . | Use proper grade and amount of lubricant. |

LUBRICANT LEAKAGE

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|-------------------------------|---|
| 1. Faulty gasket. | Oil leaks may occur at sprocket drive gear cover gasket or at other gaskets. Replace gaskets. |
| 2. Faulty oil seals | Replace oil seals. |



PROBABLE CAUSE

REMEDY

EXCESSIVE BACKLASH

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|---|--------------------------------|
| 1. Sprocket drive or pinion shaft worn or damaged | Replace worn or damaged parts. |
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EXCESSIVE WEAR ON SPROCKETS

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|---|---|
| 1. Tracks run too loosely | Adjust the tracks. (See Section 9.) |
| 2. Tracks worn excessively | Install new tracks. (See Section 9.) |
| 3. Track frame out of alignment or damaged. . | Repair, or install new track frame. (See Section 9) |