



WHEELS AND RIMS GROUP

SECTION "A"

General	Page 1
Front wheel bearing adjustment	1
Rear wheel bearing adjustment	1, 2
Oil seals - front wheels	3
Oil seals - rear wheels	3
Oil seals - rear wheels (Timken axles)	3, 4
Wheels and rims	3
Wheel bolt nut tensions (disc wheels)	3, 4

TIRES

SECTION "B"

Tire inflation	Page 1
Inflation	1
Overloading	2
Speeds	2
Service load and inflation table	3
Wheel, rim, and hub bolt tension application chart	4, 5, 6, 7

WHEELS

General

Tapered roller bearings carry the wheels and are adjustable. Satisfactory operation and life depends upon correct adjustment and proper lubrication. Every 3,000 to 5,000 miles remove the wheels, clean and inspect the bearings, races and wheel hubs. Then repack the bearings, replace the wheels and adjust the bearings. Use a short fibre wheel bearing grease.

Illustrations used in this section may vary due to the availability of Stamped, Cast and Budd wheels on various models, but the arrangement of bearings, grease seals and retainers are similar. Therefore, use illustrations for wheel mounting on the axle ONLY and disregard the design of wheel and brake.

Front Wheel Bearing Adjustment

Use an 8" wrench and apply steady pressure with one hand, pulling up the adjusting nut until a definite drag is felt on the wheel. Rotate wheel at the same time nut is being tightened to be sure that all parts are correctly seated. Back-off nut to first castellation and install new cotter pin.

Front wheel bearings should never be given a loose adjustment for such will not permit the rollers and races to be in proper contact and bearing failure will result.

Rear Wheel Bearing Adjustment

Rotate wheel and tighten inner adjusting nut until a drag or bind is felt, then back off nut about 1/6" turn. Install lockwasher and outer nut, and after tightening securely, check the adjustment. There should be a very slight shake in the wheel (with axle shaft removed) if the adjustment is correct.

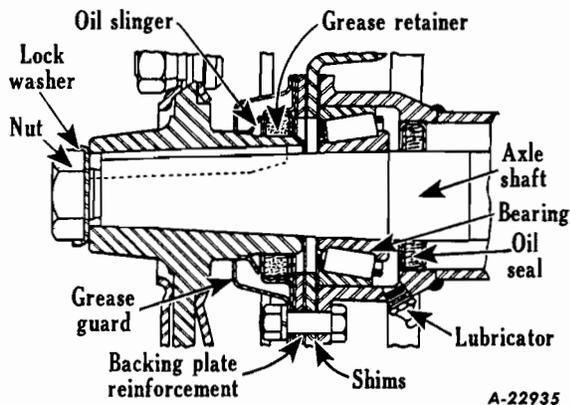


Fig. 1

NOTE: R-1060 series axle (Semi-floating) rear wheel bearings are adjusted by shims located between backing plate and end of axle housing. (See Fig. 1.)

Remove plug and install lubricator fitting as shown in Fig. 1 to lubricate bearing, re-install plug.

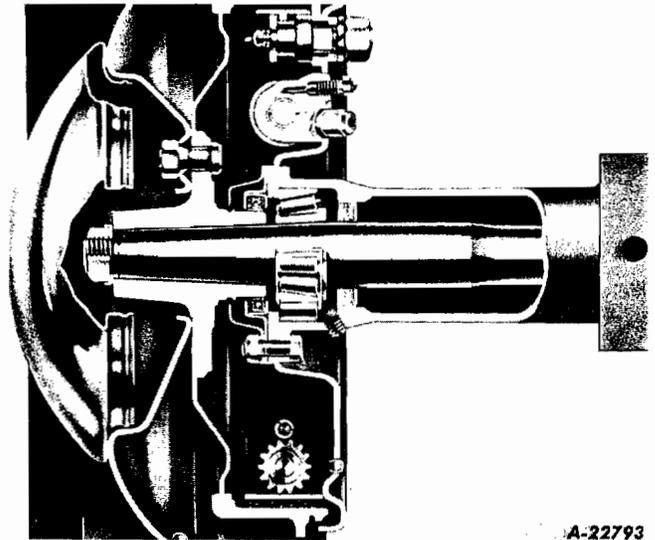


Fig. 2

Fig. 2 illustrates construction details of rear wheel assembly on axles R-1060 series.

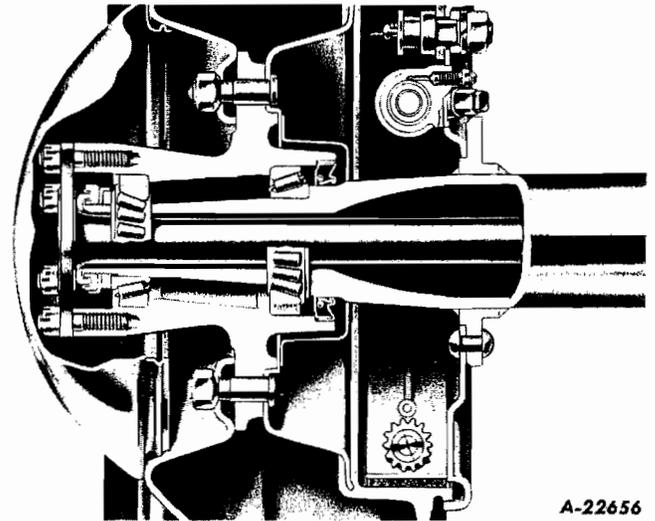


Fig. 3

Fig. 3 illustrates construction details at rear wheel assembly on axles R-1070 series.

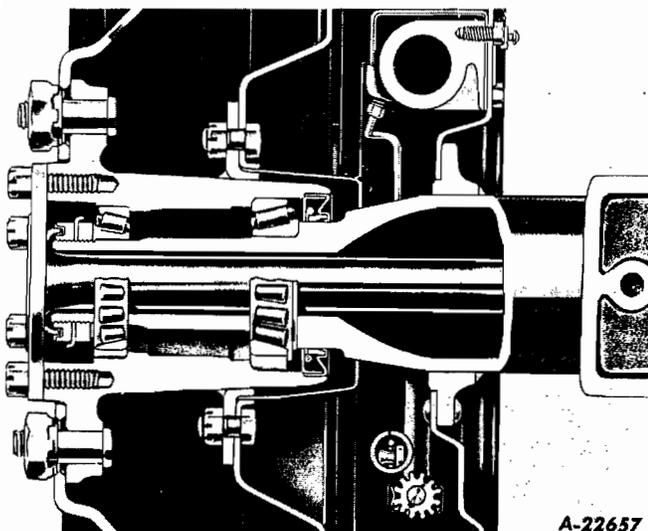


Fig. 4

Fig. 4 illustrates construction details at rear wheel assembly on axles R-1165 and R-1170 series.

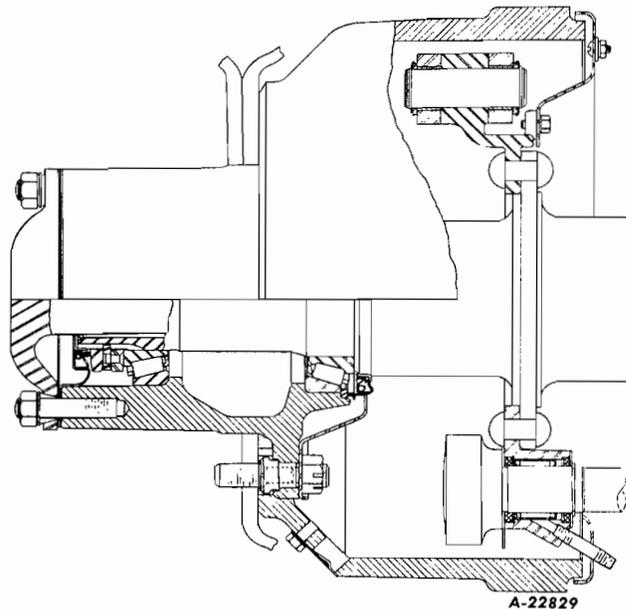


Fig. 6

Fig. 6 illustrates construction details at rear wheel assembly on axles of R-1741 series.

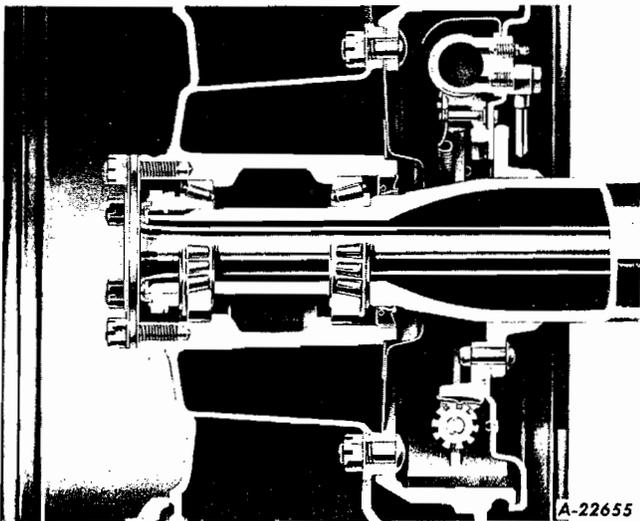


Fig. 5

Fig. 5 illustrates construction details at rear wheel assembly on axles of R-1440, R-1470, R-1530, R-2470, R-2475, R-2490, R-1555, R-1630, R-2580, R-2600, R-1540, R-1640, RF-1455, RF-1575, RF-1670, R-2465, R-2466 and R-2585 series.

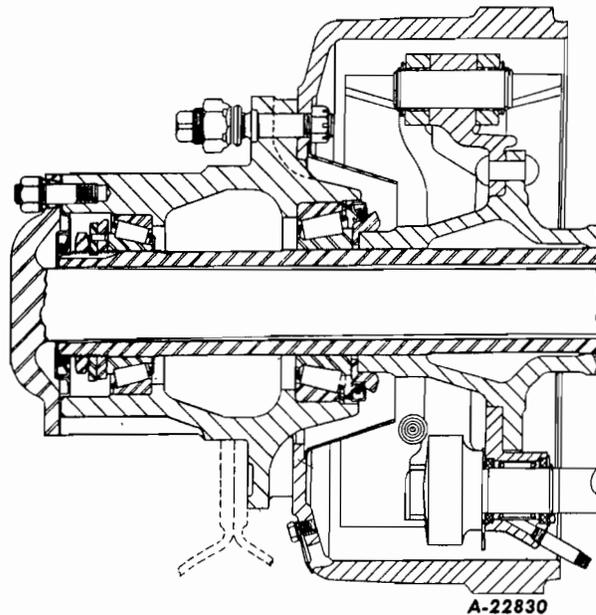


Fig. 7

Fig. 7 illustrates construction details at rear wheel assembly on axles of R-1731, R-1810, R-2741 and R-2800 series.



L-LINE MOTOR TRUCK SERVICE MANUAL

Oil Seals - Front Wheels

The front wheel oil seal should be inspected when hub or wheel is removed and replaced if necessary. When installing new seal, dip in light oil first and make sure it is properly installed in the hub to assure satisfactory service. The machined surface of the steering knuckle must be clean and free of nicks and burrs so that sealing element can seat properly on the surface provided.

Oil Seals - Rear Wheels

Place inner seal assembly in hub and drive carefully into place being sure that the seal bottoms and is aligned square with the hub. The outer seal is assembled into the bearing lock nut and is self adjusted on the axle shaft when the axle shaft is tightened against the hub. Machined surfaces of the axle housing and shaft must be clean and free of nicks and burrs to assure satisfactory service of the seals.

Oil Seals - Rear Wheels (Timken Axles)

The inner and outer wheel hub oil seals must be properly installed to assure satisfactory service. Machined surfaces of component parts and sealing surfaces of wiper rings must be clean and free of nicks or burrs. The sealing elements must seat evenly on the wiper rings.

Special tools (SE-1581) have been provided for proper installation of oil seals and wiper rings. The following illustrations show these tools in use for their specific application.

Lubricate inner seat with wheel bearing grease and place on end of axle housing. Using inner seal adapter and driving sleeve, drive the seal carefully onto the end of the axle housing until it is seated firmly against shoulder on the housing (Fig. 8).

Using a square as shown in Fig. 9, check from the end of the axle housing to the face of the sealing element at 90° intervals. The sealing element should not be in excess of .010" off parallel with the end of the housing.

Install inner seal wiper ring in wheel hub as shown in Fig. 10. The ring has one face ground and one face polished. Position the polished face outward to contact the sealing element, and the ground face seated firmly against inner bearing cup.

Following installation of the wiper ring, check installation using a .002" feeler gauge (Fig. 11) between the ring and bearing race. If the ring is in excess of .002" off parallel with the bearing cup, remove ring, check for dirt or other obstruction and reinstall.

Install inner wheel bearing. (Bearing must be properly lubricated before installation.) Install wheel hub assembly and outer wheel bearing. Turn inner nut until it is tight against the outer bearing cone and at the same time revolve the wheel to seat the tapered bearings and oil seal. Continue to tighten the nut, while revolving the wheel until a definite drag is felt, and then back off about one-sixth of a turn. Place the locking washer on the axle with the lug in the groove. Place the washer against the nut so that the pin in the nut enters one of the holes in the washer, using either side of the locking washer to accomplish this. If it is necessary to turn the inner nut to bring the pin into line with one of the holes, install washer so that the least movement of the nut is necessary. Install outer nut and tighten securely.

Install the outer oil seal wiper ring and gasket (Fig. 12).

Place gasket inside cup of wiper ring and over end of axle housing end. Use adapter driver and drive the outer wiper ring carefully onto the end of the axle housing until it seats firmly against the gasket.

Place gasket against wheel hub as shown in Fig. 13.

Install outer seal assembly and place outer gasket over hub studs. Install axle shaft, tapered dowels, lock washers and stud nuts, and tighten securely.

Wheels and Rims

Wheel stud nuts should be inspected and tightened at regular intervals. Rim clamp nuts should be kept tight and the rim and tire alignment in relation to the wheel should be checked to make sure tire is running true.

Where left- and right-hand thread studs and nuts are used, the left-hand thread nuts can be identified by a small groove machined around the flats and the studs, by letter "L" stamped on the head. Use left-hand nuts (stamped "L") on the left side of truck.

Wheel Bolt Nut Tensions (Disc Wheels)

KELSEY-HAYES WHEELS -- When tightening wheel bolt nuts on Kelsey-Hayes disc wheels, do not use excessive leverage. Use a wrench of the same length as that furnished with the tool kit.

BUDD WHEELS -- When tightening wheel bolt nuts on Budd disc wheels, use wrench which will provide sufficient leverage to tighten as follows: (see next page)



9/16" Bolt -- tighten to 250 foot-pounds.
(100 pounds pressure on a 2-1/2 foot wrench.)
3/4" Bolt -- tighten to 350 foot-pounds.
(140 pounds pressure on a 2-1/2 foot wrench.)

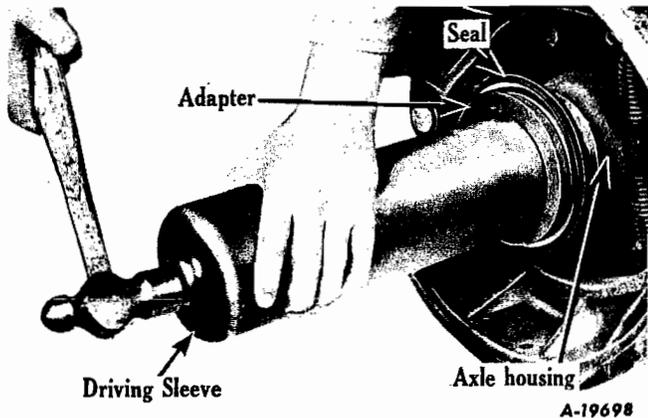


Fig. 8 - Installing inner oil seal on axle housing.

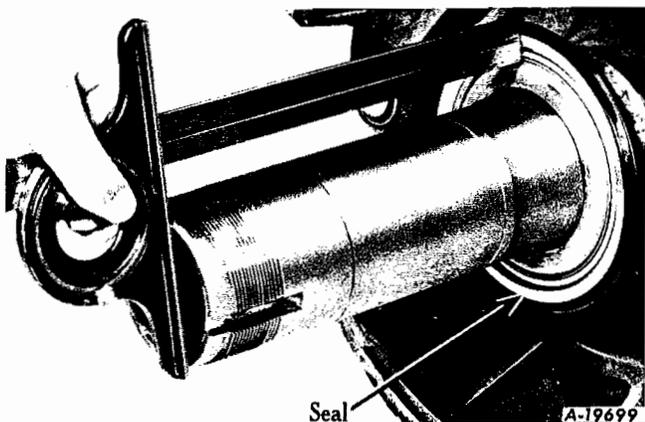


Fig. 9 - Checking alignment of inner seal assembly.

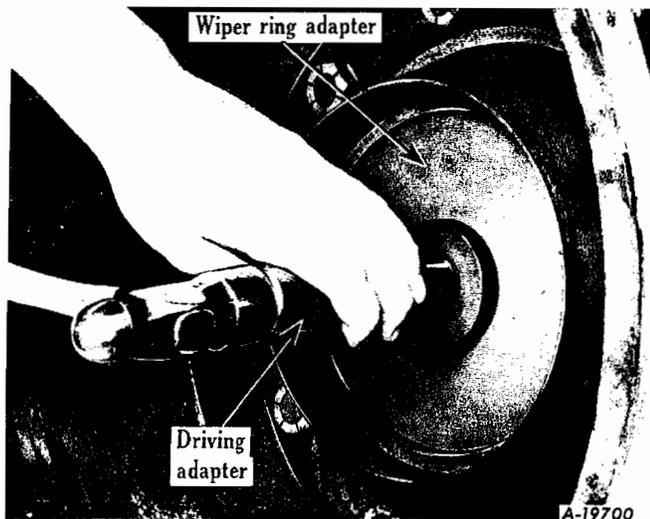


Fig. 10 - Installing inner wiper ring in wheel hub.

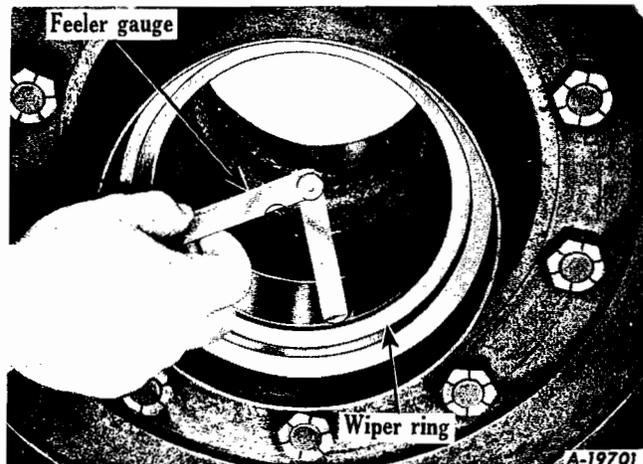


Fig. 11 - Checking wiper ring alignment.

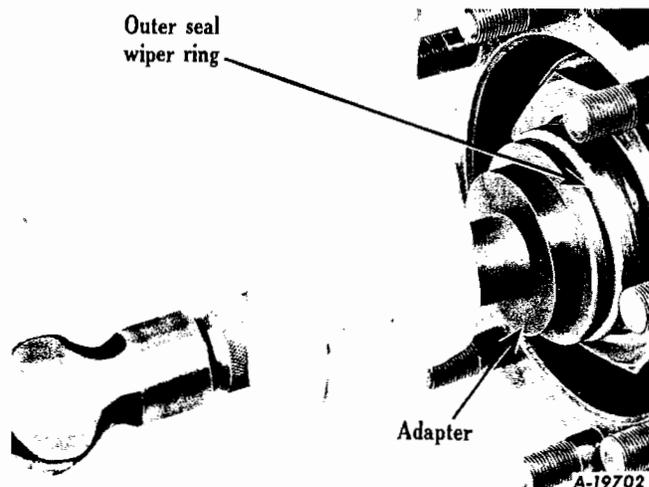


Fig. 12 - Installing outer wiper seal ring.

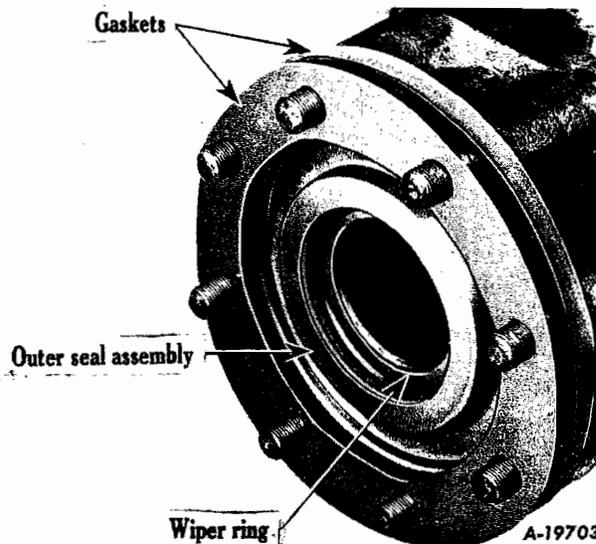


Fig. 13 - Outer seal and gaskets installed.

TIRES

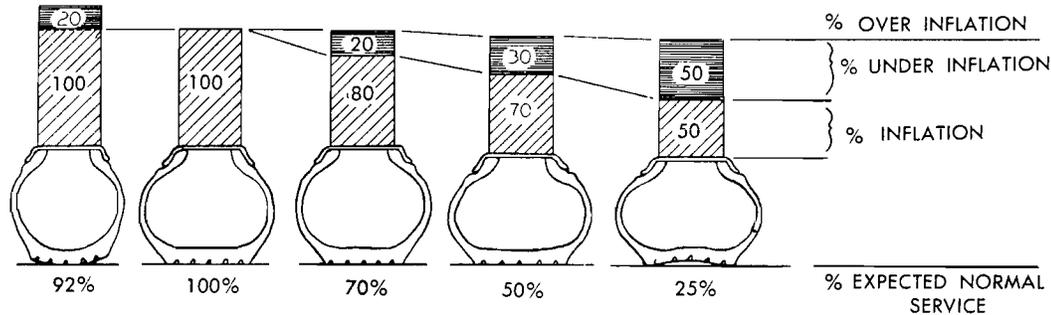
Tire Inflation

Proper tire inflation, tire loads, and road speeds are important determining factors governing tire mileage, and also affect steering ease and maneuverability. Inflation pressures should be checked at regular and frequent intervals and the pressures maintained to specifications. Use an accurate tire pressure gauge.

Inflation

Inflation pressures should be checked when tires are cool. Never bleed a hot tire.

The chart (Fig. 7) illustrates the loss in tire mileage caused by under inflation. It will be noted that a tire under-inflated only 20% will produce only 70% normal mileage.



A-16013

Fig. 1 - Inflation vs. Mileage.

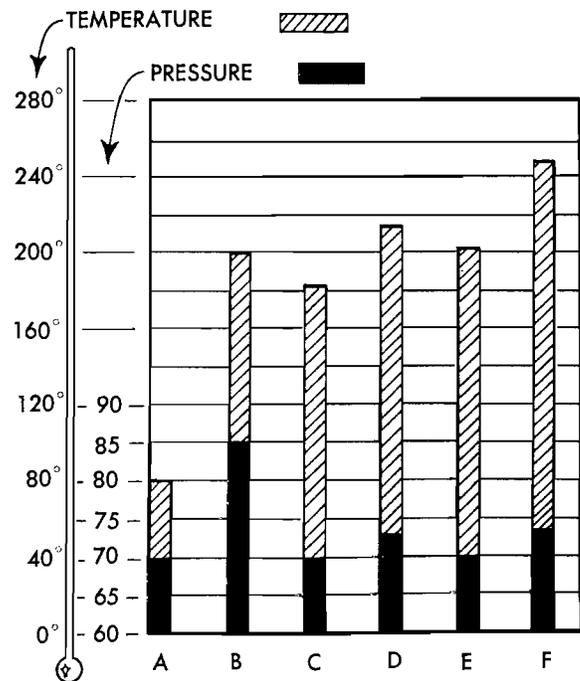
Over-inflation is also costly for a tire which is 20% over-inflated will produce only 92% normal tire mileage.

"Bleeding" of air from hot tires should never be practiced. The pressure will be reduced but an increase in temperature will result as soon as the driving continues.

The chart (Fig. 2) illustrates a condition where a tire was started cool with a pressure of 70 pounds, and at a temperature of 80°:

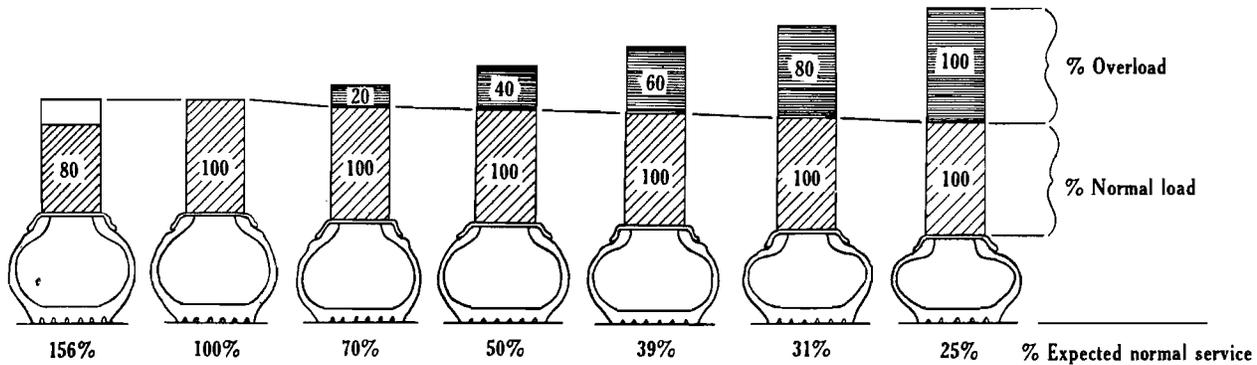
- (A) Initial conditions.
- (B) After 140 miles of driving the pressure had increased to 85 pounds and temperature to 200°.
- (C) The pressure was then "bled" to 70 pounds and an additional drive made of 140 miles. Note the temperature.
- (D) The pressure had now increased to 73 pounds but the temperature increase was approximately 220°.
- (E) Again "bleeding" was resorted to. Note the temperature.
- (F) After 200 miles the tire failed from a temperature of over 250°.

- A—INITIAL CONDITIONS
- B—AFTER 140 MILES
- C—PRESSURE "BLED"
- D—140 MILES AFTER "BLEEDING"
- E—PRESSURE "BLED"
- F—AFTER 200 MILES—TIRE FAILED



A-16011

Fig. 2 - Effects of "Bleeding".



A-16012

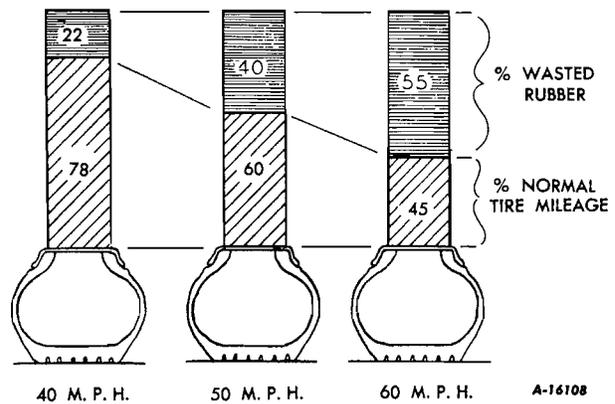
Fig. 3 - Overload vs. Mileage.

Overloading

Loading tires beyond their rated capacity is expensive, because tire mileages are rapidly decreased with overloads. The above chart (Fig. 3) illustrates how an overload of only 20% will result in tire mileage being only 70% of normal.

Speeds

Excessive speed is definitely one of the most important factors in loss of tire mileage. The chart (Fig. 4) illustrates how an increase in speed from 40 to 50 m.p.h. results in an 18% loss in mileage. An increase of speed from 40 to 60 m.p.h. results in a 33% mileage loss.



A-16108

Fig. 4 - Speed vs. Mileage.



L-LINE MOTOR TRUCK SERVICE MANUAL

SERVICE LOAD AND INFLATION TABLE

TIRE SIZE	PLY RATING	LOADS AT VARIOUS INFLATION PRESSURES										
		32	36	40	45	50	55	60	65	70	75	80
6.00x16	6	990	1065	<u>1130</u>								
6.00x20	6	1040		1225	1325	<u>1400</u>						
6.00x20	8					<u>1400</u>	1475	1550	1625	<u>1700</u>		
6.50x16	6	1135	1215	<u>1290</u>								
6.50x17	6			<u>1300</u>	1400	<u>1500</u>						
6.50x20	6			1500	1600	<u>1700</u>						
6.50x20	8					<u>1700</u>	1775	1850	<u>1950</u>			
7.00x16	6		1395	<u>1485</u>								
7.00x17	6			<u>1475</u>	1575							
7.00x17	8			1475	<u>1575</u>	1675	<u>1775</u>					
7.00x18	8			1525	1650	1750	<u>1850</u>					
7.00x20	8			1650	1775	1900	<u>2000</u>					
7.00x20	10						<u>2000</u>	2075	2150	<u>2250</u>		
7.00x24	10						2300	2375	2475	<u>2575</u>		
7.50x16	6	1455	<u>1560</u>									
7.50x16	8		<u>1560</u>	1650	1760	<u>1850</u>						
7.50x17	8			1650	1775	<u>1900</u>	2000	<u>2100</u>				
7.50x18	8			1750	1875	2000	2100	<u>2200</u>				
7.50x20	8			1875	2000	2125	2250	<u>2375</u>				
7.50x20	10						2250	2375	2500	2600	<u>2700</u>	
7.50x24	10						2550	2700	2850	2975	<u>3100</u>	
8.25x17	10			1950	2080	2200	2330	2470	<u>2585</u>			
8.25x18	10			2000	2150	2300	2425	2550	<u>2675</u>			
8.25x20	10			2175	2325	2475	2600	2750	<u>2900</u>			
8.25x20	12							2750	2900	3025	<u>3150</u>	
9.00x18	10				2600	2775	2925	3075	<u>3225</u>			
9.00x18	12								<u>3225</u>	3350	3475	<u>3600</u>
9.00x20	10				2775	2950	3125	3300	<u>3450</u>			
9.00x20	12								<u>3450</u>	3600	3725	<u>3850</u>
9.00x22	10				2950	3150	3325	3500	<u>3675</u>			
9.00x24	10				3175	3375	3575	3750	<u>3925</u>			
9.00x24	12								<u>3925</u>	4100	4250	<u>4375</u>
10.00x18	12					3100	3275	3450	3600	<u>3775</u>		
10.00x20	12					3275	3475	3650	3825	<u>4000</u>		
10.00x20	14									<u>4000</u>	4175	<u>4350</u>
10.00x22	12					3500	3700	3900	4100	<u>4275</u>		
10.00x24	12					3725	3950	4150	4250	<u>4550</u>		
11.00x20	12					3700	3900	4100	4300	<u>4500</u>		
11.00x20	14								4300	<u>4500</u>	4675	<u>4850</u>
11.00x22	12					3900	4125	4350	4550	<u>4750</u>		
11.00x24	12					4100	4350	4575	4800	<u>5000</u>		
11.00x24	14									<u>5000</u>	5200	<u>5400</u>
12.00x20	14							4625	4850	5075	<u>5275</u>	
12.00x22	14							4900	5150	5375	<u>5600</u>	
12.00x24	14							5200	5450	5700	<u>5925</u>	
13.00x20	16								5775	6025	<u>6275</u>	
13.00x24	16								6475	6750	<u>7025</u>	
14.00x20	18									7075	7350	<u>7650</u>
14.00x24	18									7900	8225	<u>8525</u>

Underscoring denotes maximum recommended loads.
Duals will carry twice the load of corresponding singles.

L-LINE MOTOR TRUCK SERVICE MANUAL



WHEEL, RIM, AND HUB BOLT TENSION APPLICATION CHART

TRUCK MODEL SERIES	PART	BOLT & STUD PART NO.	BOLT & STUD SIZE	NUT PART NO.	TYPE BOLT	WHERE USED	TYPE WHEEL	APPLI-CATION TENSION FT.-LBS.
L-110	Bolt	69956-H	1/2-20NF	69958-H		Hub to Wheel	F & R	80-90
	Bolt	69955-H	1/2-20NF	69957-H		Hub to Wheel	Kelsey-Hayes	80-90
L-120	Stud	96914-H	9/16-18NF	96916-H		Hub to Wheel	Rear	175-200
	Stud	96915-H	9/16-18NF	96917-H		Hub to Wheel	Budd	175-200
LM-120	Stud	96914-H	9/16-18NF	96916-H		Hub to Wheel	Front	175-200
	Stud	96915-H	9/16-18NF	96917-H		Hub to Wheel	Budd	175-200
L-120	Stud	81362-H	9/16-18N	81364-H		Hub to Wheel	Rear Budd	175-200
	Stud	81363-H	9/16-18N	81365-H		Hub to Wheel	Dual	175-200
L-120	Stud	96914-H	9/16-18NF	96916-H		Hub to Wheel	Rear	175-200
	Stud	96915-H	9/16-18NF	96917-H		Hub to Wheel	Budd	175-200
L-120	Stud	81368-H	9/16-18N	81364-H		Hub to Wheel	Rear	175-200
	Stud	81369-H	9/16-18N	81365-H		Hub to Wheel	Budd - Dual	175-200
L-150	Bolt	119343-H	5/8-18NF	12261-H	4	Wheel to Drum	Rear	150-180
	Bolt	75887-H	5/8-11NC	21814-H	4	Lug to Rim	Cast	150-160
L-150	Bolt	70647-R1	1/2-20NF	12260-R1	4	Wheel to Drum	Front	80-90
	Bolt	78193-R1	3/4-16N	84712-H		Hub to Wheel	Budd	300-350
	Bolt	78194-R1	3/4-16N	84711-H		Hub to Wheel		300-350
L-150	Bolt	70647-R1	1/2-20NF	12260-R1	4	Wheel to Drum	Rear	80-90
	Bolt	78193-R1	3/4-16N	84711-R1		Hub to Wheel	Budd	300-350
	Bolt	78194-R1	3/4-16N	84712-R1		Hub to Wheel		300-350
L-150	Bolt	78193-R1	3/4-16N	83155-R1		Wheel to Hub	Rear	300-350
		78194-R1	3/4-16N	83156-R1		Wheel to Hub	Budd	300-350
	Bolt		3/4-16N	41419-V		Wheel to Hub	Dual	300-350
			3/4-16N	41420-V		Wheel to Hub		300-350
L-150	Bolt	82115-R1	1/2-20NF	12260-R1	4	Wheel to Drum	Front	80-90
	Bolt	61883-R1	1/2-13NC	22230-V	2	Wheel to Rim	Cast	70-80
L-150	Bolt	119343-H	5/8-18NF	12261-R1	4	Wheel to Drum	Rear	150-180
	Bolt	75887-H	5/8-11NC	21814-H	4	Lug to Rim	Cast	150-160
L-160	Bolt	82115-R1	1/2-20NF	12260-R1	4	Wheel to Drum	Front	80-90
	Bolt	61883-R1	1/2-13NC	22230-V	2	Lug to Rim	Cast	70-80
L-160	Bolt	119343-H	5/8-18NF	12261-R1	4	Wheel to Drum	Rear	150-180
	Bolt	61883-R1	1/2-13NC	22230-V	2	Lug to Rim	Cast - Single	70-80
L-160	Bolt	119343-H	5/8-18NF	12261-R1	4	Wheel to Drum	Rear	150-180
	Bolt	75887-H	5/8-11NC	21814-H	4	Lug to Rim	Cast - Single	150-160
L-160	Stud	80339-R1	3/4-16N	84711-H		Hub to Wheel	Front	300-350
	Stud	80340-R1	3/4-16N	84712-H		Hub to Wheel	Budd	300-350
L-160	Stud	69327-R2	3/4-16N	41419-V		Hub to Wheels	Rear	300-350
		69328-R2	3/4-16N	41420-V		Hub to Wheels	Budd	300-350
	Stud		1-1/8-16N	83155-H		Hub to Wheels	Dual	250-300
			1-1/8-16N	83156-H		Hub to Wheels		250-300



Donated by John & Susan Hansen - For Personal Use Only
L-LINE MOTOR TRUCK SERVICE MANUAL

TRUCK MODEL SERIES	PART	BOLT & STUD PART NO.	BOLT & STUD SIZE	NUT PART NO.	TYPE BOLT	WHERE USED	TYPE WHEEL	APPLI-CATION TENSION FT.-LBS.
L-160	Bolt	119343-H	5/8-18NF	12261-R1	4	Wheel to Drum Lug to Rim	Rear - Dual Cast	150-180
	Bolt	75887-H	5/8-11NC	21814-H	4			150-160
LF-170	Bolt	78167-R1	5/8-18NF	12261-R1	4	Hub to Drum Lug to Wheel	Rear Dual	150-180
	Bolt	77602-R1	5/8-11NC	21814-H	4			150-160
LF-170	Stud	80339-R1	3/4-16N	41419-V		Hub & Drum to Wheel Hub & Drum to Wheel Hub & Drum to Wheel Hub & Drum to Wheel	Rear Budd Dual	300-350
		80340-R1	3/4-16N	41420-V				300-350
	Stud	1-1/8-16N	83155-H	250-300				
		1-1/8-16N	83155-H	250-300				
LF-170	Bolt	119343-H	5/8-18NF	12261-R1	4	Wheel to Drum Lug to Rim	Rear Cast	150-180
	Bolt	75887-H	5/8-11NC	21814-H	4			150-160
L-170 & L-180	Bolt	82115-R1	1/2-20NF	12260-R1	4	Wheel to Drum Lug to Rim	Front Cast	80-90
	Bolt	61883-R1	1/2-13NC	22230-V	2			70-80
L-180	Bolt	78167-R1	5/8-18NF	12261-R1	4	Hub to Drum Lug to Rim	Rear Dual	150-180
	Bolt	77602-R1	5/8-11NC	21814-H	4			150-160
L-170 & L-180	Bolt	X-4725-173	3/8-24NF	12259-R1		Hub to Drum Lug to Rim	Front Steel	40-50
	Bolt	X-4725-172	5/8-11NC	21814-H				150-160
L-180	Bolt	119343-H	5/8-18NF	12261-R1	4	Hub to Drum Lug to Rim	Rear Cast	150-180
	Bolt	75887-H	5/8-11NC	21814-H	4			150-160
L-170	Bolt	78167-R1	5/8-18NF	12261-R1	4	Hub to Drum Lug to Rim	Rear Steel	150-180
	Bolt	77602-R1	5/8-11NC	21814-H	4			150-160
L-170	Bolt	119343-H	5/8-18NF	12261-R1	4	Wheel to Drum Lug to Rim	Rear Cast	150-180
	Bolt	75887-H	5/8-11NC	21814-H	4			150-160
L-170 & L-180	Stud	144235-H	1/2-20NF	12260-R1	4	Hub to Drum Hub to Wheel Hub to Wheel	Front Budd	80-90
		55539-R1	3/4-16N	84711-H				300-350
		55540-R1	3/4-16N	84712-H				300-350
L-190	Stud	91862-HA	1/2-20NF	12260-R1	4	Hub to Drum Lug to Rim	Front Cast	80-90
		91872-H	5/8-11USS	21814-H	4			150-160
L-190	Bolt	61830-HA	5/8-18NF	12261-R1	4	Hub to Drum Lug to Rim	Rear Cast	150-180
		75887-H	5/8-11NC	21814-H	4			150-160
L-190	Stud	137991-H	5/8-18NF	12261-R1	4	Wheel to Drum Lug to Rim	Rear Cast	150-180
		54494-R1	3/4-10USS	54495-R1	SAE-3135			180-200
L-190	Stud	69354-R1	3/4-16N	131258		Drum to Wheel Drum to Wheel Wheel to Hub Wheel to Hub Wheel to Hub Wheel to Hub	Rear Budd Dual	200-230
		69355-R1	3/4-16N	131258				200-230
			3/4-16N	41419-V				300-350
			3/4-16N	41420-V				300-350
			1-1/8-16N	83155-H				250-300
			1-1/8-16N	83156-H				250-300
L-190	Stud	55575-H	3/4-16N	131258		Drum to Hub Drum to Hub Wheel to Hub Wheel to Hub	Rear Budd Dual	200-230
		55576-H	3/4-16N	131258				200-230
			3/4-16N	41419-V				300-350
			3/4-16N	41420-V				300-350
L-190			1-1/8-16N	83155-H		Wheel to Hub Wheel to Hub	Rear Budd Dual	250-300
			1-1/8-16N	83156-H				250-300
L-190	Stud	119343-H	5/8-18NF	12261-R1	4	Hub to Drum Lug to Rim	Rear - Dual Cast	150-180
		75887-H	5/8-11NC	21814-H	4			150-160

L-LINE MOTOR TRUCK SERVICE MANUAL



TRUCK MODEL SERIES	PART	BOLT & STUD PART NO.	BOLT & STUD SIZE	NUT PART NO.	TYPE BOLT	WHERE USED	TYPE WHEEL	APPLI-CATION TENSION FT.-LBS.
L-190	Stud	119343-H	5/8-18NF	12261-R1	4	Hub to Drum Lug to Rim	Rear - Cast Dual	150-180
	Stud	75887-H	5/8-11NC	21814-H	4			150-160
L-190	Stud	55575-H	3/4-16N	131258		Drum to Hub Drum to Hub Wheel to Hub Wheel to Hub Wheel to Hub Wheel to Hub	Rear - Dual Budd	200-230
	Stud	55576-H	3/4-16N	131258				200-230
			3/4-16N	41419-V				300-350
			3/4-16N	41420-V				300-350
			1-1/8-16N	83155-H				250-300
			1-1/8-16N	83156-H				250-300
L-190	Bolt	55505-H	1/2-20NF	12260-R1	4	Hub to Drum Wheel to Hub Wheel to Hub Wheel to Hub Wheel to Hub	Front Budd	80-90
	Stud	136339-H	3/4-16N	131258	300-350			
	Stud	136340	3/4-16N	131258	300-350			
			3/4-16N	84711-H	300-350			
			3/4-16N	84712-H	300-350			
L-190	Bolt	119344-H	1/2-20NF	12260-H	4	Wheel to Drum Lug to Rim	Front Cast	80-90
	Bolt	68333-H	5/8-11NC	21814-H	4			150-160
LF-190	Bolt	78167-R1	5/8-18NF	12261-R1	4	Hub to Drum Lug to Rim	Rear Steel	150-180
	Bolt	77602-R1	5/8-11NC	21814-H	4			150-160
LF-190	Bolt	78193-R1	3/4-16N	41419-V		Hub & Drum to Wheel Hub & Drum to Wheel Hub & Drum to Wheel Hub & Drum to Wheel	Rear Budd Dual	300-350
	Bolt	78194-R1	3/4-16N	41420-V				300-350
			1-1/8-16N	83155-H				250-300
			1-1/8-16N	83156-H				250-300
LF-190	Bolt	119343-H	5/8-18NF	12261-R1	4	Wheel to Drum Lug to Rim	Rear Cast	150-180
	Bolt	75887-H	5/8-11NC	21814-H	4			150-160
L-204 & L-225	Stud	48796-H	3/4-16NAT	131258		Drum & Wheel to Hub Drum & Wheel to Hub Wheel to Hub Wheel to Hub Wheel to Hub Wheel to Hub	Rear Budd Dual	300-350
	Stud	48797-H	3/4-16NAT	131258				300-350
			3/4-16N	41419-V				300-350
			3/4-16N	41420-V				300-350
			1-1/8-16N	83155-H				250-300
			1-1/8-16N	83156-H				250-300
L-205 & L-225	Bolt	61830-HA	5/8-18NF	12261-R1	4	Wheel to Drum Lug to Rim	Rear Cast	150-180
	Bolt	75887-H	5/8-11NC	21814-H	4			150-160
L-204 & L-225	Bolt	61830-HA	5/8-18NF	12261-R1	4	Wheel to Drum Lug to Rim	Rear Cast	150-180
	Bolt	75887-H	5/8-11NC	21814-H	4			150-160
L-205 & L-225	Stud	69354-R1	3/4-16N	131258		Hub to Drum Hub to Drum Wheel to Hub Wheel to Hub Wheel to Hub Wheel to Hub	Rear Budd Dual	200-230
	Stud	69355-R1	3/4-16N	131258				200-230
			3/4-16N	41419-V				300-350
			3/4-16N	41420-V				300-350
			1-1/8-16N	83155-H				250-300
			1-1/8-16N	83156-H				250-300
L-205 & L-225	Bolt	71541-R1	5/8-18NF	12261-R1	2	Hub to Drum Lug to Rim	Rear Cast	150-180
	Stud	54494-R1	3/4-10USS	54495-R1	SAE-3135			180-200
L-204 & L-225	Bolt	71541-R1	5/8-18NF	12261-R1	2	Hub to Drum Lug to Rim	Rear Cast	150-180
	Stud	54494-R1	3/4-10USS	54495-R1	SAE-3135			180-200
L-200	Stud	61565-R1	3/4-16N	131258		Hub to Drum Hub to Drum Wheel to Hub Wheel to Hub Wheel to Hub Wheel to Hub	Rear Budd	200-230
	Stud	61566-R1	3/4-16N	131258				200-230
			3/4-16N	41419-V				300-350
			3/4-16N	41420-V				300-350
			1-1/8-16N	83155-H				250-300
			1-1/8-16N	83156-H				250-300



L-LINE MOTOR TRUCK SERVICE MANUAL

TRUCK MODEL SERIES	PART	BOLT & STUD PART NO.	BOLT & STUD SIZE	NUT PART NO.	TYPE BOLT	WHERE USED	TYPE WHEEL	APPLI-CATION TENSION FT.-LBS.
L-200	Stud	182820	5/8-18NF	12261-R1	2	Hub to Drum	Front	150-180
	Stud	31714-V	3/4-16AM.N	131258		Wheel to Hub	Budd	300-350
	Stud	31715-V	3/4-16AM.N	131258		Wheel to Hub		300-350
			3/4-16AM.N	84711-H		Wheel to Hub		300-350
			3/4-16AM.N	84712-H		Wheel to Hub		300-350
L-200	Bolt	119343-H	5/8-18NF	12261-R1	4	Wheel to Drum	Front	150-180
	Bolt	68333-H	5/8-11NC	21814-H	4	Lug to Rim	Cast	150-160
L-200	Bolt	61830-HA	5/8-18NF	12261-R1	4	Wheel to Drum	Rear	150-180
	Bolt	75887-H	5/8-11NC	21814-H	4	Lug to Rim	Cast	150-160
L-210	Bolt	119343-H	5/8-18NF	12261-R1	4	Wheel to Drum	Front	150-180
	Bolt	100568-H	3/4-16N	131258		Wheel to Hub	Budd	300-350
	Bolt	100569-H	3/4-16N	131258		Wheel to Hub		300-350
			1-1/8-16N	83156-H		Wheel to Hub		250-300
		1-1/8-16N	83155-H	Wheel to Hub		250-300		
L-210	Bolt	119343-H	5/8-18NF	12261-R1	4	Wheel to Drum	Front	150-180
	Bolt	68333-H	5/8-11NC	21814-H	4	Lug to Rim	Cast	150-160
L-210	Bolt	115380-H	5/8-18NF	12261-R1	4	Wheel to Drum	Front	150-180
	Stud	91872-H	5/8-11USS	21814-H	4	Lug to Rim	Cast	150-160
L-210	Bolt	119343-H	5/8-18NF	12261-R1	4	Wheel to Drum	Front	150-180
	Bolt	68333-H	5/8-11NC	21814-H		Lug to Rim	Cast	150-160
L-210	Stud	48796-H	3/4-16N	131258		Hub to Drum	Rear	200-230
	Stud	48797-H	3/4-16N	131258		Hub to Drum	Budd	200-230
			3/4-16N	41419-V		Wheel to Hub		300-350
			3/4-16N	41420-V		Wheel to Hub		300-350
			1-1/8-16N	83155-H		Wheel to Hub		250-300
			1-1/8-16N	83156-H		Wheel to Hub		250-300
L-210	Stud	48796-H	3/4-16N	131258		Hub to Drum	Rear	200-230
	Stud	48797-H	3/4-16N	131258		Hub to Drum	Budd	200-230
			3/4-16N	41419-V		Wheel to Hub		300-350
			3/4-16N	41420-V		Wheel to Hub		300-350
			1-1/8-16N	83155-H		Wheel to Hub		250-300
			1-1/8-16N	83156-H		Wheel to Hub		250-300
L-210	Bolt	119343-H	5/8-18NF	12261-R1	4	Hub to Drum	Front	150-180
	Stud	54477-R1	3/4-16N	131258		Wheel to Hub	Budd	300-350
	Stud	54478-R1	3/4-16N	131258		Wheel to Hub		300-350
	Stud	54477-R1	1-1/8-16N	83156-H		Wheel to Hub		250-300
	Stud	54478-R1	1-1/8-16N	83155-H		Wheel to Hub		250-300
L-210	Stud	71541-R1	5/8-18NF	12261-R1	2	Wheel to Drum	Rear	150-180
	Stud	54494-R1	3/4-10USS	54495-R1		SAE-3135	Lug to Rim	Cast
L-210	Bolt	61830-HA	5/8-18NF	12261-R1	4	Wheel to Drum	Rear	150-180
	Bolt	75887-H	5/8-11NC	21814-H	4	Lug to Rim	Cast	150-160
LF-210	Bolt	61830-HA	5/8-18NF	12261-R1	4	Wheel to Drum	Rear	150-180
	Bolt	75887-H	5/8-11NC	21814-H	4	Lug to Rim	Cast	150-160
LF-210	Stud	61229-H	3/4-16N	131258		Drum to Hub	Rear	200-230
	Stud	61228-H	3/4-16N	131258		Drum to Hub	Budd	200-230
			3/4-16N	41419-V		Wheel to Hub		300-350
			3/4-16N	41420-V		Wheel to Hub		300-350
			1-1/8-16N	83156-H		Wheel to Hub		250-300
			1-1/8-16N	83155-H		Wheel to Hub		250-300

MEMORANDA

MEMORANDA
