

OPERATOR'S MANUAL

AND SPARE PARTS LIST

1954 TRACTEUR 1955

BOMBARDIER



TRACTOR

MANUEL DU CONDUCTEUR

ET LISTE DE PIÈCES DE RECHANGE



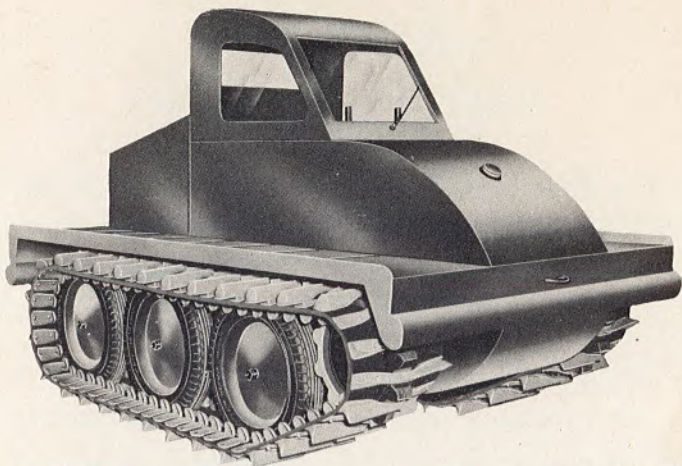
Manufactured by — Fabriqué par

BOMBARDIER SNOWMOBILE LIMITED

AUTO-NEIGE BOMBARDIER LIMITEE

VALCOURT, QUÉ., CANADA





¾ front view

Vue de l'avant

The Bombardier Tractor

shown above is equipped with the operator's cab including the heater, defroster and windshield wiper.

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Le Tracteur Bombardier

illustré plus haut est équipé de la cabine de l'opérateur incluant la chaufferette, dégivreur et essuie-vitre.

Foreword from the President

It is an accepted fact that tracked vehicles have a marked advantage over wheeled vehicles for operation in difficult ground conditions; the innovation of a flexible track with rubber belts has been a marked improvement on such vehicles in the past few years.

Our company who specializes in tracked vehicles for off-road transportation is proud to be the innovator of these flexible, light weight tracks making possible the realization of the snowmobile which has been operating in all kinds of snow and ground conditions during the past many years.

To the regular line of passenger snowmobiles, we have now added the line of tractors on flexible tracks built to specifications arrived at from 25 years of research and experimentation. This tractor is very sturdily built and is so versatile that its range of use is practically unlimited. After having tested it in operating conditions practically impossible for other types of tractors, we are convinced that the tractor we manufacture is unique, so much for its performance and efficiency as for its application to an unlimited variety of purposes.

We can assure you that this tractor will give you entire satisfaction and we are always ready to give you the best service possible.

Yours very sincerely,

J. A. BOMBARDIER,
President

Avant-Propos du Président

L'avantage marqué des véhicules à traction chenille pour des travaux dans les endroits difficiles d'accès est un fait établi depuis nombre d'années et l'innovation d'une chenille légère et flexible avec courroies en caoutchouc a été l'amélioration la plus sensible dans ce domaine.

Le mérite de l'adaptation d'une telle chenille à un véhicule moteur revient à notre maison qui se spécialise depuis nombre d'années dans les véhicules du genre auto-neige, qui peuvent circuler là où tout autre véhicule moteur ne peut le faire, tel que dans la neige, la boue, les marais ou terrains mous.

A la ligne régulière d'auto-neige genre passager, nous avons ajouté la ligne du tracteur sur chenilles fabriqué d'après les spécifications obtenues par l'expérience durant 25 années de recherches dans ce domaine. Ce tracteur de construction très robuste est d'une versatilité telle que son emploi est presque illimité. Après l'avoir éprouvé dans des conditions à peu près impossibles pour tout autre genre de tracteur, nous sommes convaincus que le tracteur que nous fabriquons est unique tant au point de vue performance et efficacité qu'à son utilisation pour les travaux les plus variés.

Nous sommes assurés que cette machine vous donnera entière satisfaction et sommes toujours à votre disposition pour vous donner le meilleur service possible.

Votre tout dévoué,

J. A. BOMBARDIER

Président

THE J-5 TRACTOR SPECIFICATIONS

Weight and Dimensions

Length	... ..	9'4"
Width	... ..	5'
Weight (with cab)	... ..	2950 lbs
Road clearance	... ..	12"

Performance

Maximum speed	... ..	25 M.P.H.
Cruising speed	... ..	20 M.P.H.
Ground bearing area (approx.)	... ..	2900 sq. inc.
Ground pressure (approx.)	... ..	1 lb. per sq. inc.
Turning radius	... ..	12'0"

Engine

Make	... ..	Chrysler
Brake horse power	... ..	115 H.P. at 3400 R.P.M.
Number of cylinders	... ..	6
Bore	... ..	3-7/16"
Stroke	... ..	4 1/2"
Battery	... ..	6 volts
Generator	... ..	45 Amp.
Clutch	... ..	Single disc — dry.
Transmission (standard)	... ..	3 speeds forward, 1 reverse.
Transmission (optional at extra cost)	... ..	4 speeds forward, 1 reverse.
Differential ratio	... ..	5.83 to 1

Track and Suspension

Track type	... ..	Rubber belts with steel cross links.
Track belt	... ..	Endless rubber and rayon cord.
Number of wheels	... ..	6
Type of wheels	... ..	Monopiece — drop center.
Tire	... ..	4.50 x 16 — 4 ply.

Frame and Hull

Chassis	... ..	100% welded — waterproof.
Frame type	... ..	Toboggan.

Miscellaneous

Fuel tank capacity	... ..	15 Imp. gals.
Cooling system capacity	... ..	14 qts imp.
Crankcase capacity	... ..	4 qts imp.
Oil filter capacity	... ..	1 qt imp.
Differential capacity	... ..	12 qts imp.
Transmission capacity	... ..	2 qts imp.

CARACTÉRISTIQUES MÉCANIQUES DU TRACTEUR J-5

Poids et dimensions

Longueur	... ..	...9'4"
Largeur	... ..	...5'
Poids (avec cabine)	... ..	...2950 lbs
Dégagement	... ..	...12"

Rendement

Vitesse maximum	... ..	...25 M.P.H.
Vitesse de route	... ..	...20 M.P.H.
Surface de portée (approx.)	... ..	...2900 po. car.
Pression au sol (approx.)	... ..	...1 lb au po. car.
Rayon de virage	... ..	...12'0"

Moteur

Marque	... ..	...Chrysler
Puissance au frein	... ..	...115 CV à 3400 T.M.
Nombre de cylindres	... ..	...6
Alesage	... ..	...3-7/16"
Course	... ..	...4 1/2"
Batterie	... ..	...6 volts
Génératrice	... ..	...45 Amp.
Embrayage	... ..	...Disque unique, sec.
Transmission (régulière)	... ..	...3 vitesses avant, 1 arrière.
Transmission (facultative ennant supplément)	... moy-	...4 vitesses avant, 1 arrière.
Rapport du différentiel	... ..	...5.83 à 1.

Voie et suspension

Chenilles	... ..	...Courroies de caoutchouc et maillons d'acier, croisés.
Courroies de chenille	... ..	...Sans fin, caoutchouc et rayonne.
Nombre de roues	... ..	...6
Genre de roues	... ..	...Monopiece concave.
Pneus	... ..	...4.50 x 16 — 4 plis

Chassis et carrosserie

Chassis	... ..	...Entièrement soudé, à l'épreuve de l'eau.
Modèle de chassis	... ..	...Toboggan.

Divers

Capacité du réservoir de carburant	... ..	...15 gal. imp.
Capacité du système de refroidissement	... ..	...14 pi. imp.
Capacité du carter	... ..	...4 pi. imp.
Capacité du filtre d'huile	... ..	...1 pi. imp.
Capacité du différentiel	... ..	...12 pi. imp.
Capacité de la transmission	... ..	...2 pi. imp.

GENERAL INSTRUCTIONS

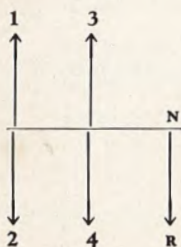
The instrument panel comprises the following items : ignition switch, starter switch, ammeter, temperature, oil and gasoline gauges.

The two levers in front of the operator are for driving the tractor and also for braking. To make a turn, just pull the lever on the side where the turn is desired. For braking, pull on both levers at the same time.

There are two control pedals; the clutch pedal on the left and the accelerator pedal on the right. The Bombardier tractor has an automatic choke.

The standard equipment of this tractor is a three-speed transmission operated by the lever on the right hand side in front of the driver's seat. For low gear and reverse, the lever handle has to be turned to the right to operate the gear selector, then pushed forward for reverse or backward for low gear. For second gear and high gear, the lever is pushed forward and backward respectively without turning the handle.

When the tractor is equipped with a four-speed transmission, there are two gear changing levers right in front of the transmission. The lever on the right side is for reverse and the one on the left for the four forward speeds.



The following chart shows the location of the different speeds.

NOTE: Only one speed is obtainable at a time, therefore, it is necessary to return the reverse lever to neutral before shifting the other lever to any forward speed and vice versa.

INSTRUCTIONS GÉNÉRALES

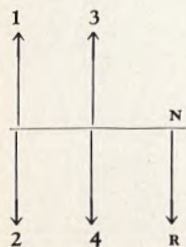
Le tableau de bord comprend les items suivants : clé d'allumage, bouton de démarreur, ampèremètre, indicateur de température, jauges d'huile et de carburant.

Les deux leviers installés à la portée de l'opérateur servent au contrôle de direction du tracteur et au freinage. Pour obtenir un tournage vers la droite on tire le levier de droite et pour tourner à gauche on tire le levier de gauche. En actionnant les deux leviers en même temps, ils agissent comme freins et on obtient un arrêt rapide.

Il y a deux pédales de commande, celle de l'embrayage à gauche et celle de l'accélérateur à droite. Le tracteur Bombardier est équipé d'un étrangleur automatique.

Ce tracteur inclut comme équipement régulier une transmission 3 vitesses actionnée par un levier à droite du siège de l'opérateur. Pour engager la transmission en première vitesse ou en renverse, la poignée du levier doit être tournée vers la droite afin d'actionner le sélecteur d'engrenage, ensuite pousser le levier vers l'avant pour obtenir la renverse, ou tirer vers l'arrière pour la première vitesse. Pour engager la transmission en deuxième ou troisième vitesse, le levier est poussé vers l'avant ou tiré vers l'arrière sans tourner la poignée du levier.

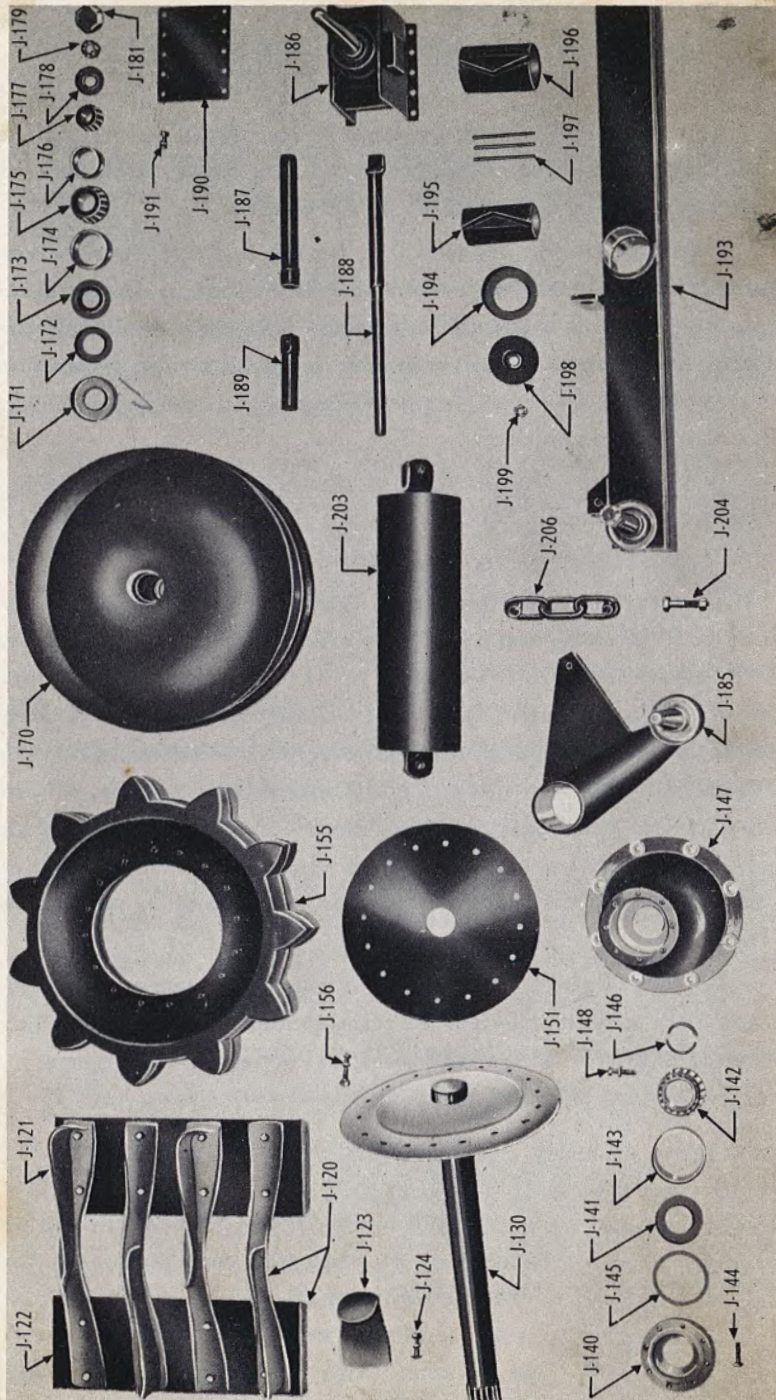
Lorsque l'unité est équipée d'une transmission 4 vitesses avant il y a deux leviers de changement de vitesses placés juste en avant de la transmission. Le levier de droite sert à la marche arrière et celui de gauche aux 4 vitesses avant.



Le croquis ci-dessous montre la position des diverses vitesses.

REMARQUE: On ne peut obtenir qu'une vitesse à la fois, par conséquent, il faut ramener le levier de marche arrière au point mort (neutre) avant d'embrayer le levier de gauche pour n'importe quelle vitesse avant et vice-versa.

TRACK - DRIVE - WHEEL AND SUSPENSION



EXPLODED VIEW

TRACK - DRIVE - WHEEL AND SUSPENSION

TRACK

- J-120 Trask assembly.
- J-121 Track cross link and lug assembly.
- J-122 Track belt.
- J-123 Track guard.
- J-124 Track, bolt, nut and lockwasher.

DRIVE

- J-130 Axle and flange assembly.
- J-140 Axle bearing cap.
- J-141 Axle bearing seal.
- J-142 Axle bearing cone.
- J-143 Axle bearing cup.
- J-144 Axle bearing cap bolt.
- J-145 Axle bearing shim.
- J-146 Axle bearing lock.
- J-147 Drive axle housing.
- J-148 Drive axle housing bolt and washer.
- J-151 Drive sprocket flange.
- J-155 Drive sprocket.
- J-156 Drive sprocket bolt, nut and washer ass'y.

WHEEL

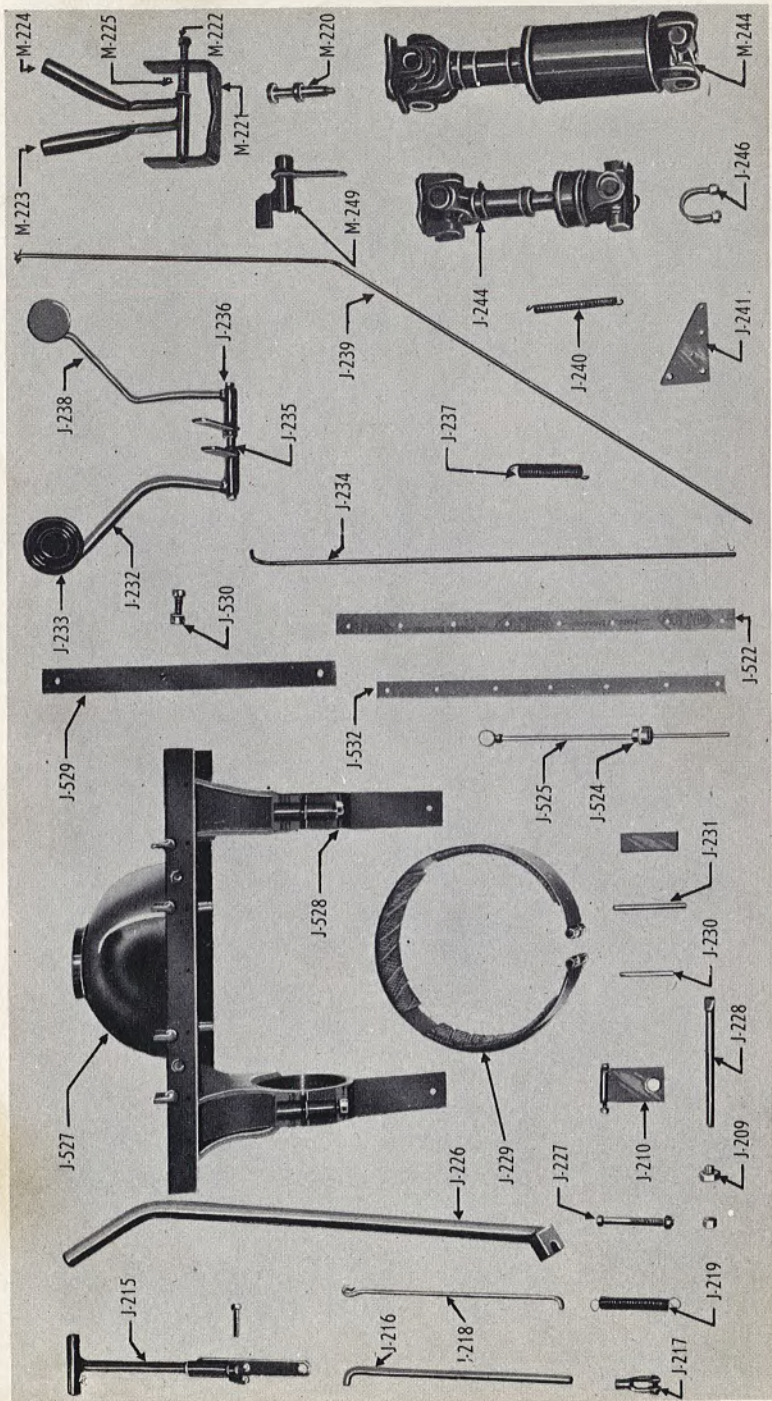
- J-170 Wheel assembly.
- J-171 Wheel mud excluder.
- J-172 Wheel mud excluder rubber.
- J-173 Wheel seal.
- J-174 Wheel cup (inner)
- J-175 Wheel cone (inner)

- J-176 Wheel cup (outer)
- J-177 Wheel cone (outer)
- J-178 Wheel lock washer.
- J-179 Wheel nut.
- J-180 Wheel nut cotter pin.
- J-181 Wheel cap.
- J-182 Wheel tire.
- J-183 Wheel tube.

SUSPENSION

- J-184 Bogie spindle right.
- J-185 Bogie spindle left. (shown)
- J-186 Rear spindle assembly, Right or Left.
- J-187 Adjusting screw nut and tube.
- J-188 Adjusting screw.
- J-189 Adjusting screw lock nut.
- J-190 Rear spindle plate.
- J-191 Rear spindle bolt, nut and washer.
- J-192 Tandem axle right.
- J-193 Tandem axle left (shown)
- J-194 Axle grease retainer.
- J-195 Axle sleeve inner.
- J-196 Axle sleeve outer.
- J-197 Axle needle bearing.
- J-198 Axle stop washer.
- J-199 Axle nut.
- J-203 Suspension spring assembly.
- J-204 Suspension spring chain bolt and nut.
- J-206 Suspension spring chain.

CONTROL PARTS



EXPLODED VIEW

CONTROL PARTS

TRANSMISSION (3 speed)

- J-215 Gearshift lever. *604-002*
- J-216 Gearshift control rod.
- J-217 Gearshift control rod clevis assembly.
- J-218 Gearshift selector rod.
- J-219 Gearshift selector rod return spring.

STEERING AND BRAKE LEVER

- J-226 Steering and brake lever.
- J-227 Steering and brake lever bolt and lock nut.
- J-228 Steering and brake yoke.
- J-209 Steering and brake yoke adjusting nut.
- J-210 Steering lever plate.
- J-229 Steering and brake band and lining assembly.
- J-211 Brake band lining and rivets.
- J-230 Steering and brake band pin short.
- J-231 Steering and brake band pin long.

DIFFERENTIAL

- J-527 Differential carrier assembly.
- J-528 Differential bearing adjuster lock bolt.
- J-529 Differential carrier stiffener.
- J-530 Differential carrier stiffener bolt, nut and washer.
- J-531 Differential carrier assembling bolt and lockwasher.
- J-532 Differential carrier gasket set.
- J-521 Differential cover.
- J-523 Differential cover assembling bolt.
- J-522 Differential cover gasket set.
- J-524 Filler plug.
- J-525 Oil level gauge.
- J-526 Drain plug.

CLUTCH

- J-232 Clutch pedal.

- J-233 Clutch pedal pad.
- J-234 Clutch rod (3 speed)
- J-235 Clutch pedal bushing.
- J-236 Clutch pedal bolt, nut and washer.
- J-237 Clutch rod return spring.
- J-242 Clutch release fork (3 speed) (Not shown).

THROTTLE

- J-238 Throttle pedal.
- J-239 Throttle rod.
- J-240 Throttle rod return spring.
- J-241 Throttle lever.

PROPELLER SHAFT (3 speed)

- J-244 Propeller shaft assembly.
- J-245 Universal joint repair package.
- J-246 Propeller shaft U-bolt, nut and washer.

TRANSMISSION (4 speed)

- M-220 Selector extension.
- M-221 Shifter bracket.
- M-222 Shifter bracket bolt and lock nut.
- M-223 Reverse lever.
- M-224 Forward lever.
- M-225 Forward lever spring.

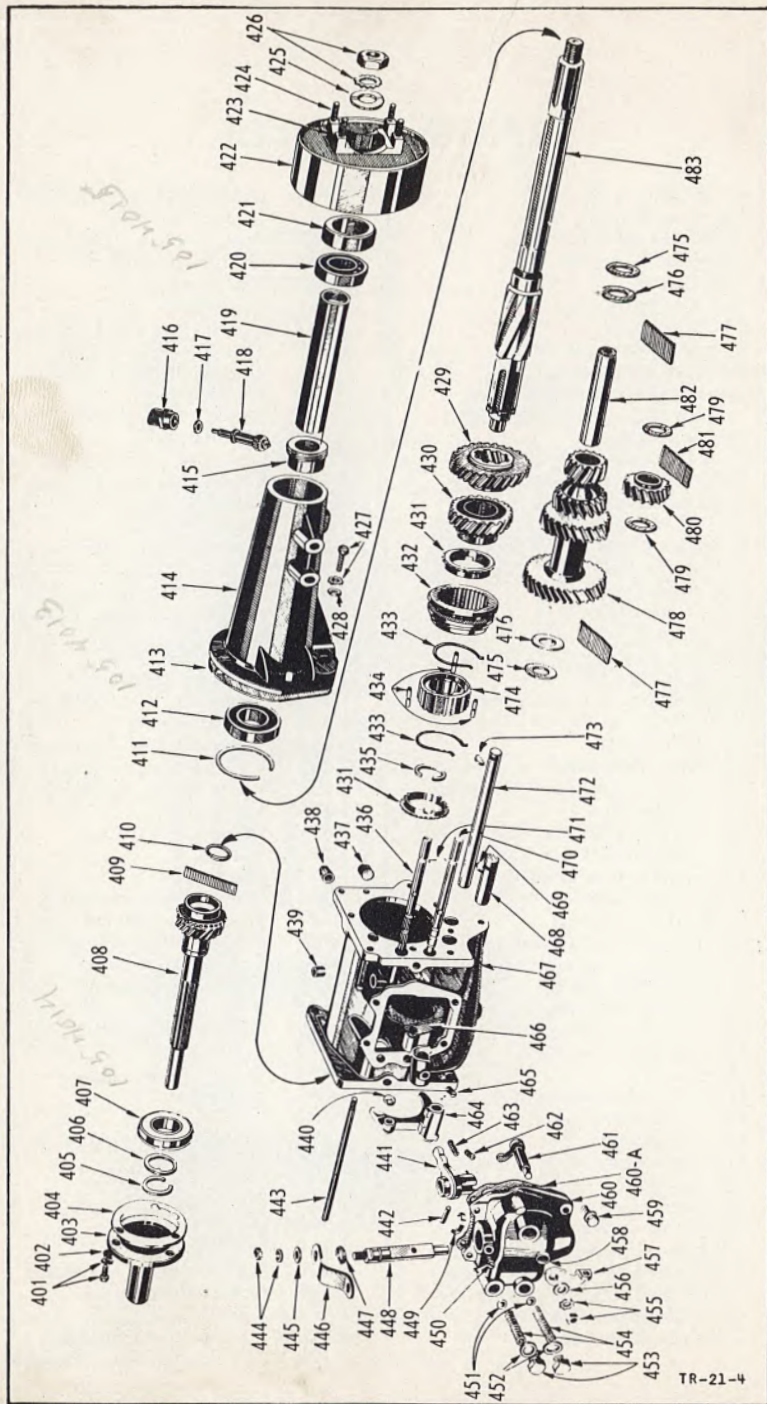
CLUTCH

- M-234-1 Clutch rod (4 speed)
- M-249 Clutch release fork lever (4 speed)

PROPELLER SHAFT (4 speed)

- M-244 Shaft assembly.
- M-245 Universal joint repair package.

TRANSMISSION (3 Speeds)



EXPLODED VIEW

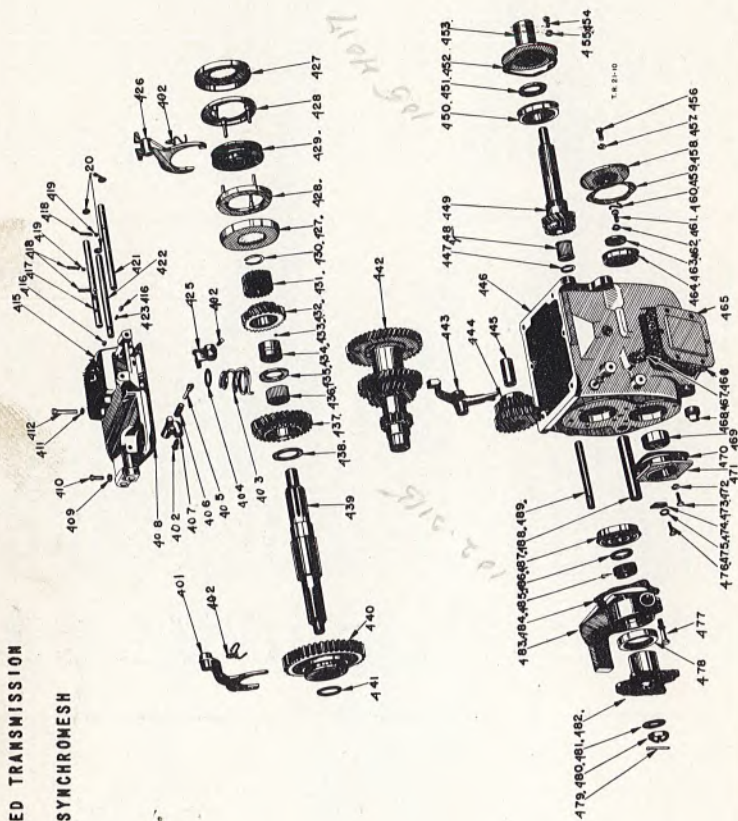
TR-21-4

TRANSMISSION (3 Speeds)

J-401	Pinion bearing retainer screw.	J-427	Case extension screw.	J-453	Gearshift selector ball spring screw.
J-402	Retainer screw grommet.	J-428	Case extension lockwasher.	J-454	Gearshift selector ball spring.
J-403	Pinion bearing retainer.	J-429	Case extension screw grommet.	J-455	Gearshift selector lever nut and lockwasher.
J-404	Retainer gasket.	J-430	Sliding gear low and reverse.	J-456	Selector lever nut plain washer.
J-405	Pinion bearing snap ring (thin)	J-431	Second speed gear.	J-457	Gearshift selector lever.
J-405	Pinion bearing snap ring (medium)	J-432	Synchronized stop ring.	J-458	Selector shaft seal - cam.
J-405	Pinion bearing snap ring (thick)	J-432	Clutch gear sleeve assembly.	J-459	Gearshift housing stud.
J-405	Pinion bearing snap ring (extra-thick)	J-433	Clutch gear sleeve.	J-460	Gearshift housing.
J-406	Pinion bearing washer.	J-433	Clutch sleeve.	J-460A	Gearshift housing gasket.
J-407	Drive pinion bearing.	J-434	Synchronizer shifting plate.	J-461	Selector cam and shaft assembly
J-408	Drive pinion.	J-435	Synchronizer spring. (in pack)	J-462	Gearshift fork lock screw.
J-409	Mainshaft pilot bearing rollers.	J-435	Clutch gear snap ring (thin).	J-463	Gearshift lever return spring.
J-410	Mainshaft pilot bearing snap ring.	J-435	Clutch gear snap ring (medium).	J-464	Gearshift fork - second and direct.
J-411	Mainshaft rear bearing snap ring (thin)	J-435	Clutch gear snap ring (thick).	J-465	Gearshift fork lock screw.
J-411	Mainshaft rear bearing snap ring (medium)	J-436	Clutch gear snap ring (extra-thick)	J-466	Gearshift fork - low and reverse.
J-411	Mainshaft rear bearing snap ring (thick)	J-437	Gear shift rail - low and reverse.	J-467	Transmission case.
J-411	Mainshaft rear bearing snap ring (extra-thick)	J-438	Transmission filler plug.	J-468	Reverse idler gear shaft.
J-412	Mainshaft rear bearing.	J-439	Transmission drain plug.	J-469	Idler gear shaft key.
J-413	Case extension gasket.	J-440	Gearshift rail interlock plug.	J-470	Gearshift rail second and direct.
J-414	Case extension.	J-441	Gearshift rail plug.	J-471	Gearshift rail interlock.
J-415	Speedometer drive gear.	J-441	Gearshift lever - rail shifter.	J-472	Countershaft.
J-416	Speedometer pinion sleeve.	J-442	Gearshift lever pin.	J-473	Countershaft key.
J-417	Speedometer pinion oil seal.	J-443	Gearshift fork guide rail.	J-474	Clutch gear - sliding.
J-418	Speedometer drive pinion.	J-444	Gearshift operating lever nut.	J-475	Countershaft gear thrust washer - oilite (thin).
J-419	Mainshaft bearing spacer.	J-444	Gearshift operating lever lockwasher.	J-475	Countershaft gear thrust washer - oilite (medium)
J-420	Case extension bearing.	J-445	Gearshift operating lever nut plain washer.	J-476	Countershaft gear thrust washer - oilite (thick).
J-421	Case extension oil seal.	J-446	Gearshift operating lever.	J-476	Countershaft gear thrust washer plate steel.
J-422	Hand brake drum.	J-447	Gearshift housing seal.	J-477	Countershaft bearing roller.
J-423	Mainshaft flange.	J-448	Gearshift lever.	J-478	Countershaft gear.
J-424	Propeller shaft bolt.	J-449	Gearshift lever shaft rail shifter.	J-479	Reverse idler gear washer.
J-425	Mainshaft flange washer.	J-450	Gearshift lever pin lock spring.	J-480	Reverse idler gear.
J-426	Mainshaft flange nut and lockwasher.	J-451	Gearshift shaft lock screw.	J-481	Idler gear bearing roller.
		J-452	Gearshift selector ball spring screw washer.	J-482	Countershaft bearing spacer.
				J-483	Transmission mainshaft.

TRANSMISSION (4 Speeds) SYNCHROMESH

4 SPEED TRANSMISSION SYNCHROMESH

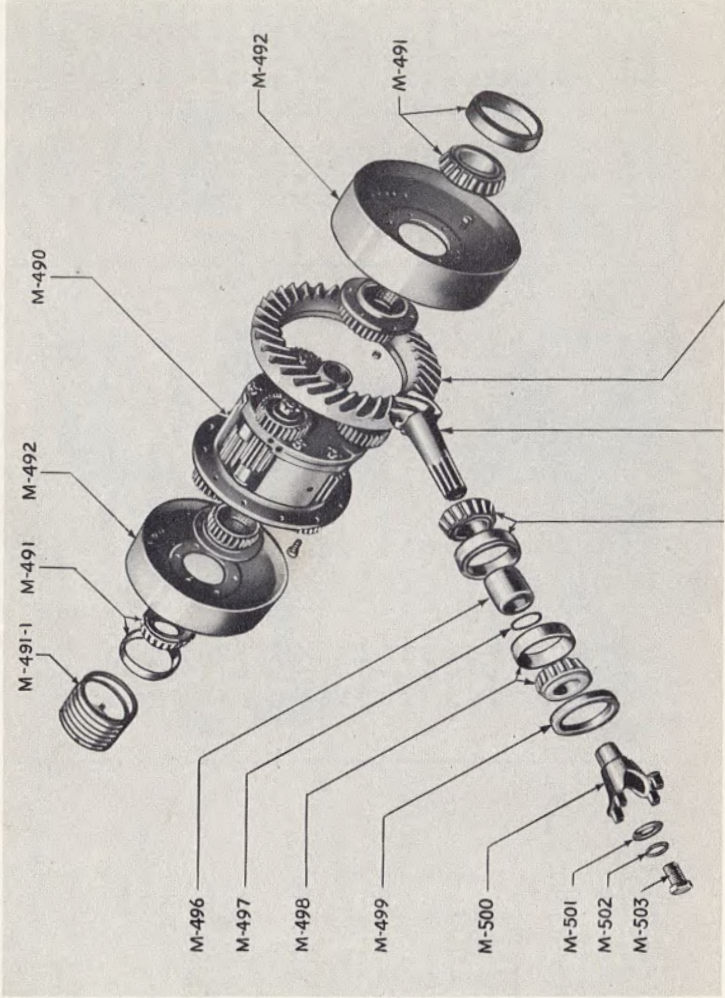


EXPLODED VIEW

TRANSMISSION (4 Speeds) SYNCHROMESH

M-401	First and Second Shift Fork	M-434	Third Speed Gear Bushing	M-461	Retainer Washer Screw
M-402	Lock Screw and Lock Wire	M-435	Third Speed Gear Locating Washer	M-462	Retainer Washer Screw
M-403	Gear Shift Lever Spring	M-436	Second Speed Gear Rollers	M-463	Bearing Retainer Washer
M-404	Lever Spring Seat	M-437	Second Speed Gear	M-464	Countershaft Front Bearing
M-405	Reverse Rail Shift Latch Plunger	M-438	Gear Locating Washer	M-465	Power Take-off Cover
M-406	Latch Plunger Spring	M-439	Mainshaft	M-466	Take-off Cover Gasket
M-407	Reverse Rail Lug	M-440	Low and Second Sliding Gear	M-467	Case Filler Plug
M-408	Case Cover Gasket	M-441	Rear Bearing Shim	M-468	Case Drain Plug
M-409	Case Cover Screw Lockwasher	M-442	Countershaft	M-469	Countershaft Rear Bearing
M-410	Case over Screw (Short)	M-443	Reverse Shift Fork	M-470	Rear Bearing Retainer Gasket
M-411	Case Cover Screw Lockwasher	M-444	Reverse Idler Gear	M-471	Rear Bearing Retainer
M-412	Case Cover Screw Long	M-445	Idler Gear Bushing	M-472	Retainer Screw Lock Washer
M-415	Gear Shift Case Cover	M-446	Case	M-473	Retainer Screw
M-416	Rail and Interlock Plunger	M-447	Pilot Bearing Spacer	M-474	Idler Gear Shaft Lock Plate
M-417	Reverse Rail	M-448	Pilot Bearing	M-475	Lock Plate Screw Lockwasher
M-418	Rail Poppet Ball Spring	M-449	Main Drive Pinion	M-476	Lock Plate Screw
M-419	Rail Poppet Ball	M-450	Drive Pinion Bearing	M-477	Rear Bearing Retainer Screw & Lockwasher
M-420	Rail Hole Plug	M-451	Pinion Bearing Retainer Nut	M-478	Rear Bearing Oil Seal
M-421	Low and Second Rail	M-452	Pinion Bearing Retainer Gasket	M-479	Flange Nut Cotter Pin
M-422	Third and Direct Rail	M-453	Pinion Bearing Retainer	M-480	Flange Nut
M-423	Rail Interlock Pin	M-454	Bearing Retainer Screw	M-481	Flange Nut Washer
M-425	Low and Second Rail Lug	M-455	Retainer Screw Lockwasher	M-482	Transmission End Flange
M-426	Third and Fourth Shift Fork	M-456	Countershaft Front Bearing Retainer Screw	M-483	Mainshaft Rear Bearing Retainer
M-427	Synchronizer Stop Ring (Outer)	M-457	Retainer Screw Lockwasher	M-484	Rear Bearing Retainer Gasket
M-428	Synchronizer Stop Ring (Assembly)	M-458	Countershaft Front Bearing Retainer	M-485	Speedometer Drive Gear
M-429	Synchronizer Sliding Clutch	M-459	Bearing Retainer Gasket	M-486	Drive Gear Spacer
M-430	Synchronizer Snap Ring	M-460	Retainer Washer Screw Lockwasher	M-487	Main Shaft Rear Bearing
M-431	Synchronizer Clutch Gear			M-488	Reverse Idler Gear Shaft
M-432	Main Shaft Third Speed Gear			M-489	Gear Shift Reverse Fork Rail
M-433	Bushing Retainer Pin				

RING GEAR, PINION, DIFFERENTIAL AND BEARING



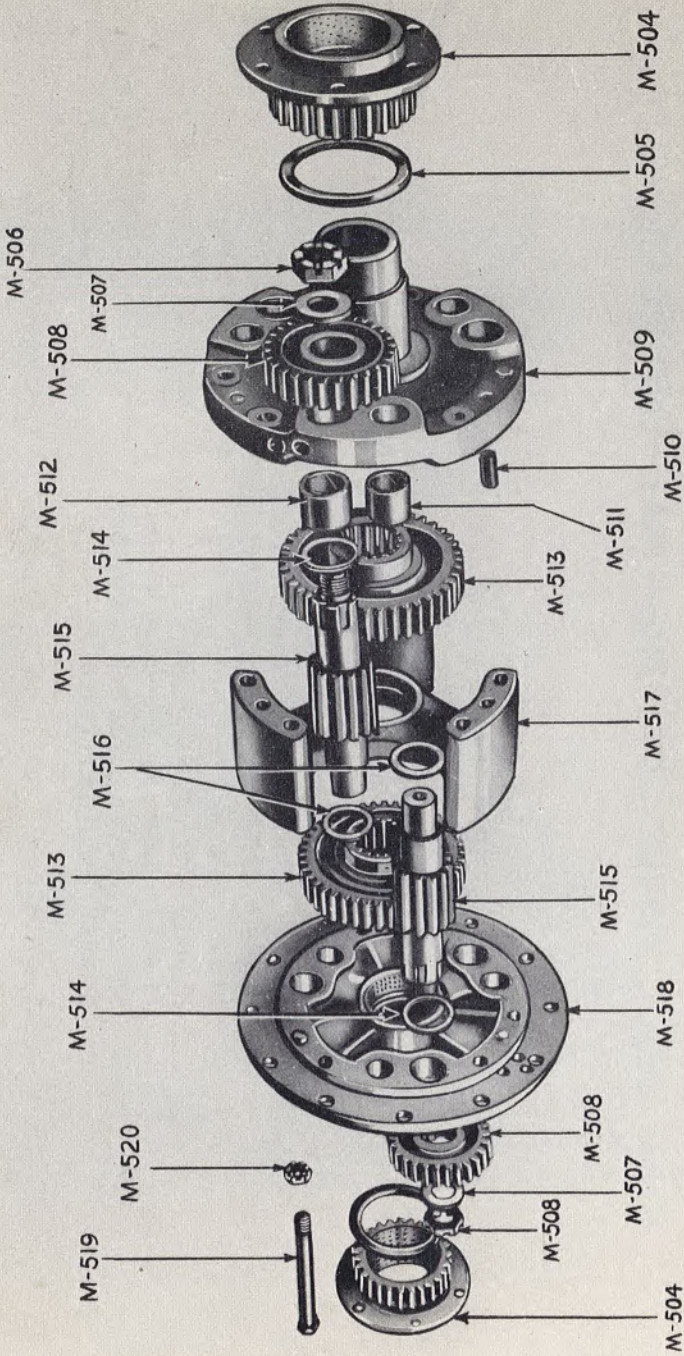
M-495 M-493 M-493

EXPLODED VIEW

RING GEAR, PINION, DIFFERENTIAL AND BEARING

M-490	Differential assembly.
M-491	Differential carrier bearing assembly.
M-491-1	Bearing adjuster.
M-492	Steering brake drum.
M-493	Crown gear and pinion assembly (matched set)
M-495	Drive pinion bearing assembly.
M-496	Drive pinion sleeve.
M-497	Pinion bearing adjusting shim.
M-498	Drive pinion front bearing assembly.
M-499	Pinion gear housing oil seal.
M-500	Pinion — flange.
M-501	Pinion flange locking washer.
M-502	Pinion flange bolt lockwasher.
M-503	Pinion flange bolt.

DIFFERENTIAL ASSEMBLY



EXPLODED VIEW

DIFFERENTIAL ASSEMBLY

M-504	Brake drum gear.
M-504-1	Brake drum gear bushing.
M-505	Brake drum gear thrust washer.
M-506	Differential pinion nut (hex.)
M-507	Differential pinion washer.
M-508	Differential planetary gear.
M-509	Differential side case (right)
M-510	Differential case dowel pin.
M-511	Differential pinion gear bushing (small).
M-512	Differential pinion gear bushing (large).
M-513	Axle to differential pinion gear.
M-514	Differential planetary thrust washer.
M-515	Differential pinion gear.
M-516	Differential pinion thrust washer.
M-517	Differential center (spacer)
M-518	Differential case (left) (Crown gear carrier)
M-519	Differential gear case bolt (hex)
M-520	Differential gear case bolt nut.

ENGINE

FUEL AND EXHAUST SYSTEMS

J-540	Motor support kit (3 speed).
J-541	Muffler gasket.
J-542	Muffler outlet pipe.
J-543	Muffler bolt and nut.
J-544	Muffler.
J-545	Muffler outlet pipe spring.
J-546	Fuel tank cap.
J-547	Fuel tank outlet and elbow.
J-548	Fuel line (tank to pump)
J-549	Fuel line to pump elbow.
J-550	Fuel tank.
J-551	Fuel tank filler neck insulator.
J-557	Fuel gauge (dash).
J-558	Fuel gauge (tank).
J-559	Fuel gauge gasket.
J-560	Oil gauge (dash).
J-561	Oil gauge (engine).

ELECTRICAL SYSTEM

J-562	Battery.
J-563	Battery bracket (removable part).
J-565	Battery cable ground.
J-566	Battery cable negative.
J-564	Wiring harness assembly.
J-567	Circuit breaker.
J-570	Ignition switch.
J-573	Ammeter.
J-568	Windshield wiper assembly.
J-569	Windshield wiper arm.
J-571	Windshield wiper blade.
J-572	Windshield wiper switch.
J-574	Headlight (1) kit assembly including switch.
J-575	Voltage regulator.
J-576	Distributor point set.
J-577	Distributor condenser.
J-578	Distributor rotor.
J-579	Distributor cap.
J-580	Distributor wires.

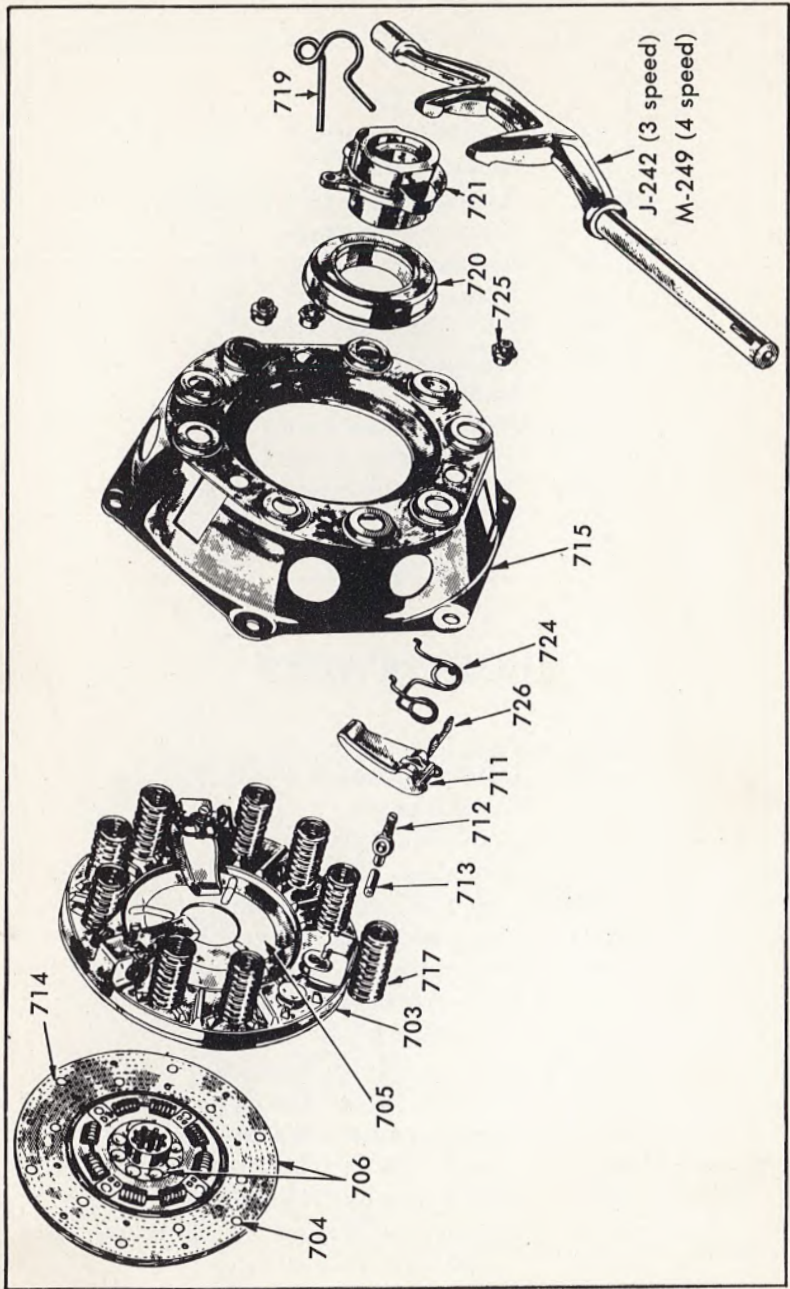
COOLING SYSTEM

J-581	Radiator.
J-393	Radiator fan.
J-392	Radiator fan belt.
J-546	Radiator cap.
J-551	Radiator filler neck insulator.
J-585	Water outlet elbow.
J-587	Radiator metal hose 2".
J-588	Radiator hose 2".
J-589	Radiator hose clamp 2".
J-590	Radiator metal hose 1½".
J-591	Radiator hose 1½".
J-592	Radiator hose clamp 1½".
J-593	Temperature gauge (dash)
J-594	Temperature gauge (engine)

BODY PARTS

J-601	Cab, lower part.
J-602	Cab, top part.
J-603	Cab hinge pin.
J-604	Windshield glass.
J-605	Side glass.
J-606	Operator's seat assembly.
J-607	Operator's back rest cushion.
J-608	Rear glass.
J-609	Dash and bracket assembly.
J-610	Cab support rod.
J-611	Cap support friction plate.
J-612	Cab support friction disc and arm.
J-613	Defroster hose (flexible) long.
J-614	Defroster hose (flexible) short.
J-615	Engine cowling, top part.
J-616.	Engine cowling and fan guard assembly.
J-617	Engine side door right.
J-618	Engine side door left.
J-619	Draw bar pin.
J-620	U-towing bolt.

CLUTCH



EXPLODED VIEW

CLUTCH (3 speed)

J-701	Housing assembly.
J-703	Pressure plate.
J-704	Disc facing rivets.
J-705	Pressure plate baffle.
J-706	Disc assembly.
J-711	Release lever.
J-712	Release lever eye bolt.
J-713	Release lever pin.
J-714	Disc facing.
J-715	Cover.
J-717	Pressure spring.
J-719	Release bearing pull back spring.
J-720	Release bearing.
J-721	Release bearing sleeve.
J-242	Release fork.
J-724	Release lever spring.
J-725	Release lever eye bolt nut.
J-726	Release lever strut.
J-727	Housing pan.
J-728	Clutch cover and pressure plate ass'y.
J-729	Release bearing and sleeve assembly.

CLUTCH (4 speeds)

M-701	Housing assembly.
M-703	Pressure plate.
M-704	Disc facing rivets.
M-705	Pressure plate baffle.
M-706	Disc assembly.
M-711	Release lever.
M-712	Release lever eye bolt.
M-713	Release lever pin.
M-714	Disc facing.
M-715	Cover.
M-717	Pressure spring.
M-719	Release bearing pull back spring.
M-720	Release bearing.
M-721	Release bearing sleeve.
M-249	Release fork.
M-724	Release lever spring.
M-725	Release lever eye bolt nut.
M-726	Release lever strut.
M-727	Housing pan.
M-728	Clutch cover and pressure plate ass'y.
M-729	Release bearing and sleeve assembly.

INSTALLATION AND ADJUSTMENT OF THE TRACK

To install the track assembly, remove five consecutive cross links and pass this part of the track over the sprocket; then pass the track over the wheels after having brought the rear wheel forward as far as it will go. To do this, remove the adjusting screw lock nut, loosen the rear spindle plate bolts and slacken the adjusting screw.

The track is adjusted by turning the adjusting screw. Then install the lock nut and tighten the bolts on the rear spindle plate. The normal tension of the tracks is the one that will lower the front end of the tractor to the same height as the rear end, that is 31 inches from the ground to the top of the mudguard.

ADJUSTMENT OF THE CONTROL LEVERS

The steering and brake levers are adjusted by means of a nut which should be tightened if the levers have excessive free play. When the tractor is in operation, do not drag the brake bands unnecessarily. All the levers — transmission or from the pedals — are adjustable by means of nuts or clevis.

INSTALLATION OF AXLES OR SPROCKETS

To replace a sprocket, it is necessary to remove the track assembly :

We recommend the following procedure to replace an axle :

- A: Remove the bolts which hold the aluminum axle support to the chassis.
- B: The axle and support can then be removed in one piece so that it can be easily repaired.

When an axle is replaced, the bearings should be adjusted by means of shims before the axle and support are reinstalled.

INSTALLATION ET AJUSTEMENT DE LA CHENILLE

Pour installer la chenille enlever 5 traverses consécutives et passer cette partie de la chenille par dessus la roue de commande. Passez la chenille sur les roues après avoir poussé la roue arrière vers l'avant.

L'ajustement de la chenille est donné en serrant ou desserrant l'écrou d'ajustement. Ne pas oublier de serrer le contre-écrou et les plaques de pression de l'unité d'ajustement.

La tension normale à donner aux chenilles est celle qui fera baisser le devant du tracteur à la même hauteur que l'arrière soit 31 pouces du plancher au dessus de l'aile.

AJUSTEMENT DES LEVIERS DE CONTRÔLE

Un écrou sert à l'ajustement des leviers de contrôle lequel doit être resserré si les leviers ont un libre jeu excessif. Lorsque le tracteur est en opération, ne pas laisser traîner les bandes des freins de contrôle en ayant soin de ne tirer les leviers que lorsque le virage ou le freinage est requis. Tous les leviers pour les pédales de contrôle ou transmission sont ajustables par l'entremise d'écrous ou de clevis d'ajustement.

INSTALLATION DES ESSIEUX OU DES ROUES DE COMMANDE

Pour faire le remplacement d'une roue de commande ou d'un essieu, il est nécessaire d'enlever la chenille d'après les détails donnés dans les instructions précédentes.

Nous recommandons la procédure suivante pour le remplacement d'un essieu de différentiel.

- A. Desserrez et enlevez les boulons qui tiennent le support d'essieu en aluminium au châssis du tracteur.
- B. Le mécanisme de l'essieu et support peut ensuite s'enlever d'un morceau afin d'être réparé avec facilité.

Lorsqu'un essieu est remplacé l'ajustement des coussinets d'essieu doit être fait avec l'aide de "shims" avant de faire la réinstallation de l'essieu et du support assemblé.

LUBRIFICATION

of the Bombardier J-5 Tractor Model

ENGINE, TRANSMISSION AND PROPELLER SHAFT

Every 60 hours.

DIFFERENTIAL

Drain after every 60 hours of operation to make sure that the oil is clean and does not contain water resulting from condensation, especially in Winter. It can be used again after filtering it or replaced using SAE 30.

CONTROL JOINTS

Every 60 hours.

SUSPENSION and WHEEL BEARING

At every 60 hours of operation — use a grease gun.

CARBURATOR AIR FILTER

This filter contains an oil bath which should be checked often; clean and replace the oil at least at every 60 hours or more often if necessary. In some cases, this should be done daily if the tractor operates in excessively dusty conditions.

MEMO _____

LUBRIFICATION

du tracteur Bombardier modèle J-5

MOTEUR, TRANSMISSION ET ARBRE DE COMMANDE

Toutes les 60 heures.

DIFFÉRENTIEL

Enlever l'huile à toutes les 60 heures pour vous assurer qu'elle est propre et ne contient pas d'eau dû à la condensation surtout en hiver, remettre dans le différentiel en la filtrant pour enlever les impuretés ou remplacer par SAE no: 30.

JOINTS DE CONTRÔLES

Lubrification toutes les 60 heures aux joints et intersections.

COUSSINETS DE SUSPENSION ET ROUES

Avec fusil graisseur n'excédant pas 60 heures d'opération.

FILTRE À L'AIR DU CARBURATEUR

Ce filtre contient un bain d'huile qui doit être vérifié souvent et nettoyé en remplaçant l'huile au moins à toutes les 60 heures. Voire même à tous les jours dans les conditions de poussière excessive tel que hersage, battage, etc.

MEMO _____

TRACK AND SPROCKET CARE AND ADJUSTMENT

Marvelous results have been obtained on our snowmobiles with our exclusively designed rubber sprocket wheels, much to our customers' satisfaction. Due to the various uses of our machines, especially during the dry summer months, we feel necessary to explain a few technical points, in order to guarantee the best possible performance.

Water is an ideal lubricant for rubber and, as our vehicles are currently being used during the dry months, it is important that the operator should use every opportunity to water the track, either by passing through damp or water spots or over damp grass. This natural lubrication of the sprocket teeth will prevent heating and peeling.

Care should also be given not to use a track when, due to long wear, its cross-bars have developed sharp edges that will quickly damage the sprocket. It is best to replace such cross-bars. It is recommended to run the machine over damp ground for a hundred miles to allow the new cross-bars to polish evenly on the sprocket without damaging it. Remember that water cools and lubricates the rubber sprocket wheel. This knowledge will enable you to increase fivefold the life of your sprockets and obtain maximum

PERFORMANCE AND SATISFACTION

ENTRETIEN DES CHENILLES ET ROUES DE COMMANDE

A leur grande satisfaction, nos nombreux clients ont obtenu des résultats splendides avec les roues de commande en caoutchouc, brevetées par nous et conçues spécialement pour nos autoneiges et tracteurs. Cependant, comme nos véhicules servent à de multiples usages, surtout l'été, nous avons cru bon de fournir quelques précisions techniques propres à assurer à nos clients la plus entière satisfaction.

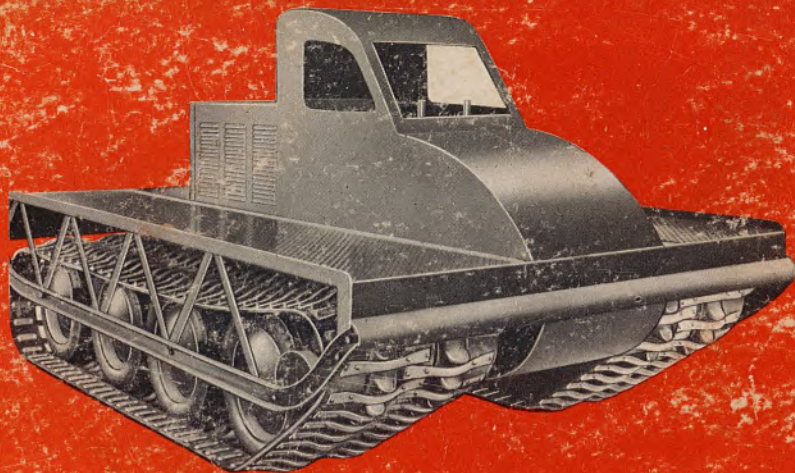
Comme nos véhicules servent souvent pendant les mois secs de l'été il est bon de savoir que l'eau est un parfait lubrifiant pour le caoutchouc. Par temps chaud et sec, le conducteur ne devrait donc pas manquer une occasion de mouiller les chenilles, soit en passant dans l'herbe ou dans des flaques d'eau. Cela lubrifiera les dents des roues de commande, les empêchant ainsi de chauffer et de peler.

Il faut aussi veiller à ne pas se servir d'une chenille dont les traverses, par suite d'usure excessive, ont un angle coupant qui endommagera rapidement la roue de commande. Il faut remplacer ces traverses usées. On recommande, pour permettre aux traverses neuves de se polir sur la roue sans l'avarier, de faire passer le tracteur en terrain humide, pour les premiers cent milles. L'eau refroidit et lubrifie la roue de commande en caoutchouc. L'application de cette connaissance technique vous permettra de prolonger d'au moins cinq fois la durée de vos roues de commande et d'obtenir le maximum de

RENDEMENT et de SATISFACTION

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FOR
EFFICIENT OPERATION
ANYWHERE

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POUR UN
MEILLEUR RENDEMENT
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LE TRACTEUR BOMBARDIER MUSKEG

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THE BOMBARDIER SNOWMOBILE
L'AUTO-NEIGE BOMBARDIER

