

TRACKSTER

SERVICE BULLETIN

Service Dept. CUSHMAN MOTORS Lincoln, Nebraska



9A
Revised
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TRANSMISSION OIL

All TRACKSTER vehicles now being shipped from the factory have an oil mixture consisting of 4 quarts Arctic oil and 3 quarts automotive Type "F" fluid in the transmission.

We recommend this mixture be installed in all vehicles in the field because it is satisfactory for use in all temperatures and eliminates the need to change oil each season.

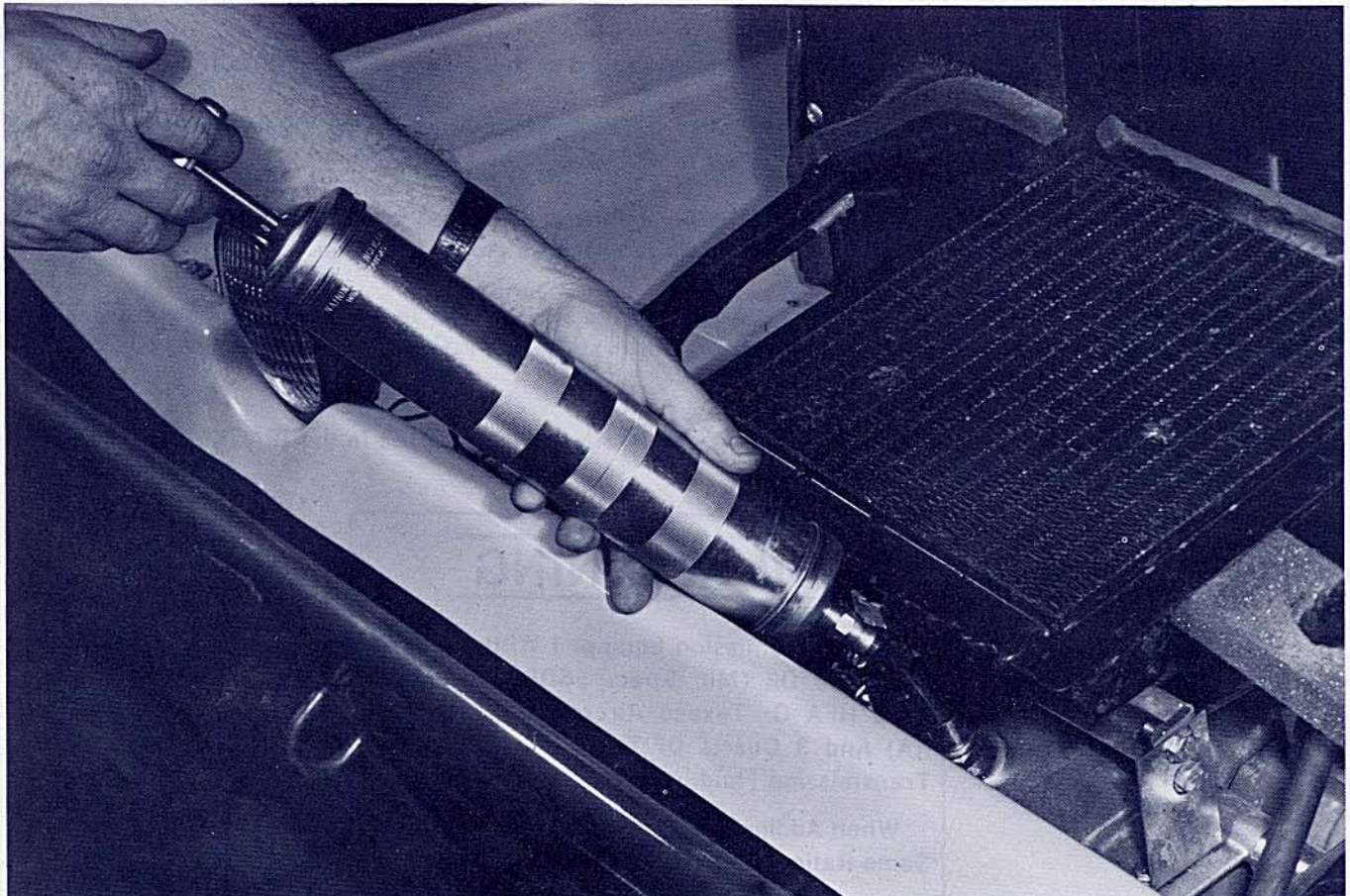
The recommended Arctic oils are:

Texaco Aircraft Hydraulic Oil AA

Mobil Aero Hydraulic Oil HFA

Military Spec. 5605 applies to both. These oils are available at most Texaco and Mobil bulk distributors and airports.

Depending on the type of the existing oil in the transmission, either 3 or 4 quarts must be removed to provide the mixture. This can best be accomplished by drawing the oil out through the pickup tube in the front of the transmission with a suction gun.



1. Remove the heat exchanger mounting bolts.
2. Loosen the hose clamp securing the hose to the oil pickup tube.
3. Lift the lower end of the heat exchanger far enough to free the hose from the tube and force it slightly to one side. A short length of rubber hose or tubing attached to a suction gun can now be inserted into the pickup tube.

NOTE: It is not necessary to disturb the hose connections on either side of the heat exchanger or remove the heat exchanger. Move the unit aside only far enough to provide access to the pickup tube to prevent breaking the seal on the remaining hose connections.

4. Install the new transmission oil, reinstall hose connection and heat exchanger hardware.
5. Test drive the vehicle and check for proper operation and air leaks.

A vehicle which fails to move when the T-handle is advanced, pulls to the right or left when the T-handle is in the straightforward position or has a lack of power, may have an air leak in the drive system.

CAUTION: When a vehicle shows indications of an air leak, cease operation immediately. Damage to the hydrostats can result from continued operation since the system pumps air rather than oil.

To determine if an air leak is existent, run the engine for 2 or 3 minutes to thoroughly circulate the system, shut the engine off and take a reading on the dipstick. Allow the vehicle to set for approximately 30 minutes and again observe the fluid level on the dipstick. If there is a rise in the fluid level between the first and second reading, an air leak is allowing the fluid in the heat exchanger to drain back into the transmission reservoir. An air leak in the TRACKSTER drive system is air entering the system rather than air escaping.

A convenient way to detect an air leak is with the use of a mechanic's stethoscope with the probe and diaphragm removed, leaving only the ear plugs and hose. With the engine cover and heat exchanger cover removed, run the engine for a few minutes to circulate the system. With the engine shut off, the stethoscope will sufficiently magnify the air leak to make positive identification.

Air leaks may occur at the filters, at the connections leading into the hydrostatic transmissions, at the hose connections, at the heat exchanger inlet, at the heat exchanger outlets or in the heat exchanger itself.

After an air leak has been detected and repaired, start the engine to recirculate the system and again check for a rise in the fluid level to be sure another leak was not missed through the original test.

No bleeding of the system is necessary. Start the engine and run at idle speed for 2 or 3 minutes to allow full circulation of fluid to all components. Test drive the vehicle to check for proper operation.

Record the type of fluid being used. Decals as shown below are available for installation on the panel near the dipstick. Order Part No. 822456 from Service Department, Cushman Motors, P.O. Box 82409, Lincoln, Nebraska 68501.

NOTE: The oil types specified in this bulletin are the only oils approved for use in the TRACKSTER. Do not substitute any other types.

OIL WARNING

This Transmission Equipped With 4 Quarts Of Arctic Oil (Mil. Spec. 5606, i.e., Mobil Aero HFA Or Texaco Aircraft Hydraulic Oil AA) And 3 Quarts Of Type "F" Automotive Transmission Fluid.

When Adding Oil Add Approximately At The Same Ratio As Above.

Any Deviation Will Void Warranty.