IMPORTANT SERVICE INFORMATION FOR:

- ✓ SERVICE MANAGER
- ✓ SERVICE ADVISOR
- ✓ WARRANTY PERSONNEL
- ✓ TECHNICIAN
- ✓ PARTS DEPARTMENT

BULLETIN NUMBER:
SB22-J-002

ISSUE DATE:
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GROUP:
ENGINE

HIGHER THAN EXPECTED OIL CONSUMPTION

AFFECTED VEHICLES

- 2020i – 2023MY N-Series Isuzu Vehicles
  Equipped with 6.6L (L8T) gas engines
- 2012 – 2020MY N-Series Isuzu Vehicles
  Equipped with 6.0L gas engines
- 2022MY N-Series Isuzu Vehicles
  Equipped with 6.0L (PSI) gas engines

INFORMATION

All engines require oil to lubricate and protect the load bearing and internal moving parts from wear including cylinder walls, pistons, and piston rings. When a piston moves down its cylinder, a thin film of oil is left on the cylinder wall. During the combustion process, part of this oil layer is consumed. As a result, varying rates of oil consumption are accepted as normal in all engines. The purpose of this bulletin is to describe different instances where oil consumption occurs and to make available a worksheet to assist the technician in determining if oil consumption is excessive.

Oil usage has a direct relationship with the amount of fuel used. The harder an engine works, the more fuel and oil it will use. Therefore, oil usage as a factor of fuel usage is a more accurate indicator of acceptable oil consumption.

The accepted rate of oil consumption for the affected vehicles in this bulletin is 0.946 liter (1 qt) within 379 liters (100 gallons) of fuel used. This rate only applies to vehicles under warranty, maintained in accordance with the appropriate maintenance schedule, driven at legal speeds and within design intent of the vehicle.

Many factors can affect an owner's concern with oil consumption. Driving habits and vehicle maintenance vary from owner to owner. Thoroughly evaluate each case before deciding whether the vehicle in question has abnormal engine oil consumption.

See the Service Procedure in this bulletin for inspection and procedural information.

SERVICE PROCEDURE

Gasket and External Leaks

Inspect the oil pans, engine covers, and the engine oil cooler for leakage. Inspect for oil leakage into the engine coolant.

Improper Reading of the Oil Level Indicator (Dipstick)

The vehicle must be parked on a level surface to obtain accurate oil level readings. Verify that the dipstick tube is fully seated in the block. When checking the oil level, make sure the dipstick is wiped clean before taking an oil level reading and fully depress the dipstick until the shoulder bottoms out on the dipstick tube. The dipstick should be the proper part number for the engine/vehicle that is being checked.

Not Waiting Long Enough After Running Engine to Check Oil Level

The vehicle should be allowed to sit for at least 15 minutes, after the engine has been shut off, before taking an oil level reading to assure the oil has had enough time to drain back into the crankcase. To ensure accurate results, the temperature of the oil should be close to the same temperature as the last time the oil level was checked.

Improper Oil Fill After an Oil Change

Following an oil change, verify that the proper amount and type of oil was put in the engine and that the oil level on the dipstick is not above the full mark or below the add marks. Refer to the Owner's Manual or Service Manual for information on recommended oil quantity, viscosity, and quality.

High Speed or High RPM Driving

Continuous driving at high speeds/high RPMs may increase oil consumption. Because this may not always be an everyday occurrence, it is hard to determine exactly how much the oil economy will be affected.

Towing or Heavy Usage

Towing a trailer or hauling additional weight will increase oil consumption. Large frontal area trailers will further increase the work required from the engine, especially at highway speeds, and thus increases the rate of oil consumption.

PTO Operation

Operation of a PTO will increase fuel and oil usage, as the PTO driven accessory uses engine power to operate.

Crankcase Ventilation System

Verify that the positive crankcase ventilation (PCV) system is operating properly. Blockages, restrictions, or damage to the PCV system can result in increased oil use.

Oil Dilution from Condensation

On vehicles that are usually driven short distances, less than 8 km (5 mi), especially in colder weather, condensation generated from cold engine operation may not get hot enough to evaporate out of the oil. When this occurs, the dipstick may indicate that the oil level is over-full. Subsequent driving on a trip of sufficient length to enable normal engine operating temperature for 30 minutes or more, to vaporize excess moisture, may give the customer the impression of excessive oil consumption.

Engine Temperature

If an engine is run at overheated temperatures (see Owner's Manual or Service Manual) for more than brief periods, oil will oxidize at a faster than normal rate. In addition, gaskets may distort, piston rings may stick, and excessive wear may result. Verify that all cooling system components are in proper working order.

Engine Wear

Piston scuffing, excessive piston-to-wall clearance, tapered or out of round cylinders, worn, damaged or improperly installed valve guides, seals and piston rings will all cause an increase in oil consumption.

MEASUREMENT OF OIL CONSUMPTION

NOTE: For 2020MY N-Series vehicles equipped with 6.6L L8T engines: Ensure that CB21-J-001A Customer Satisfaction Campaign Engine Oil Dipstick & Owner Manual Replacement has been completed before starting this procedure, if applicable. Confirm vehicle eligibility and campaign status by using IVIS (Isuzu Vehicle Information System).

IMPORTANT: Engines require a period of time to BREAK IN so that moving parts are properly seated. Therefore, oil economy should not be tested until the vehicle has accumulated at least 8000 km (5000 mi) and the oil has been changed for the first time. During initial engine break-in periods before the first oil change, oil consumption may exceed 1.9 liters (2 quarts) or more per 379 liters (100 gallons) of fuel used.

1. Verify that the engine has no external leaks. Repair as necessary.

2. Begin oil consumption test after next regularly scheduled oil and filter change. Oil changes should not be performed during the test.

3. Verify that the engine is at normal operating temperature (see Owner's Manual or Service Manual).

4. Park the vehicle on a level surface.

5. Wait at least 15 minutes, after the engine is shut off, before checking the oil level to make sure that most of the oil has had time to drain back into the crankcase.

6. Verify that the oil level is at, but not above, the full mark on the dipstick and that the proper viscosity and quality oil are being used as recommended in the Owner's Manual.

7. Dealer should record the vehicle mileage and date at the start of the test on the form included in this bulletin.

8. Ask the customer to verify and record the date, odometer, oil level, and fuel added, each time the vehicle is fueled, following steps 3-5 and return the vehicle to the dealership if the oil level is found at or below the add mark, 0.946 liter (1 qt) low, if possible. The dealer will add oil to return the oil level to full. If the oil level remains above the add mark, the customer should continue to operate the vehicle and verify the engine oil level until either the oil level drops to or below the add mark or at least 4800 km (3000 mi) has accumulated since the test began before returning to the dealership for a final evaluation.

9. If the final evaluation shows that the engine uses more than 0.946 liter (1 qt) in 379 liters (100 gallons) of fuel used, follow the published symptom diagnostics as described in the appropriate Service Manual. If the oil consumption test shows that the engine uses less than 0.946 liter (1 qt) in 379 liters (100 gallons) of fuel used, explain to the customer that their engine meets the guidelines for oil consumption.

Oil Consumption Worksheet

Owner Name	Location
Dealer Name	Dealer Code
Assign TAC	TAC Case #
Engine Model	Serial #
VIN	Oil Brand
Oil Viscosity	Fuel Brand

	DATE	ODOMETER READING	ENGINE HOURS	FUEL QUANTITY ADDED	OIL QUANTITY ADDED
Start				_____	_____
1					
2					
3					
4					
5					
6					
7					
8					
9					
Total					

Calculation:

System	Oil Used	/	Fuel Used	=	Qt/Gal or L/L	*		=	Oil Consumption Qt/100 Gal L/379L
English		/		=		*	100	=	
Metric		/		=		*	379	=	

Oil consumption of 0.946L/379L of fuel (1 qt./100 gal.) or less is considered acceptable.