NISSAN

NISSAN FORKLIFT

OPERATOR'S MANUAL MODEL H01, H02 SERIES

H012-E

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A Word to NISSAN FORKLIFT Operators

This booklet is designed to acquaint you with the many features of your new NISSAN FORKLIFT truck. Maintenance and operation procedures are outlined, as well as technical information. We urge you to follow the recommendations contained in this booklet, so that the truck will remain free of trouble throughout its working life. Please familiarize yourself with this booklet, and refer to it when necessary.

If you encounter any problems with your NISSAN FORKLIFT truck, contact the authorized NISSAN dealer in your area and request a complete check-up. The dealership will insure that your Lift Truck is serviced in accordance with the latest factory approved methods.

All information, specifications and illustrations in this manual are on a basis of the latest data obtainable at the time of the publication. Nissan reserves the right to make changes or improvements at any time without notice.

NISSAN MOTOR CO., LTD.

Industrial Machinery Division

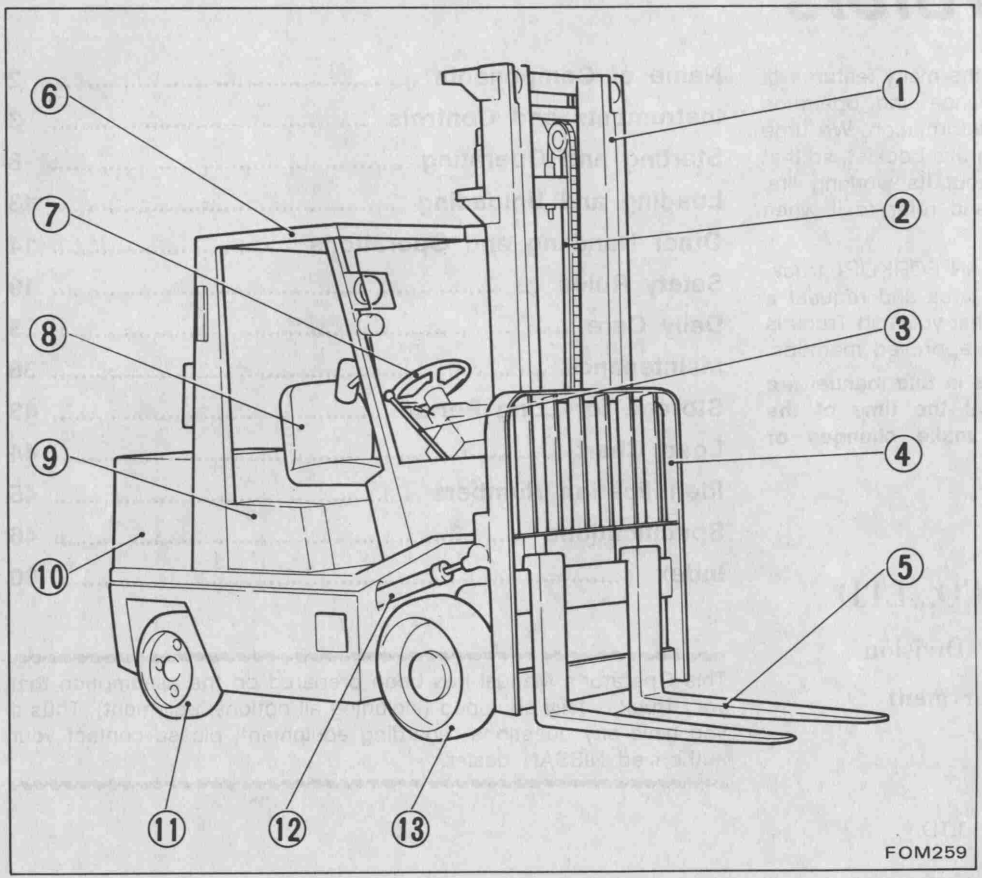
Overseas Sales Department

Tokyo, Japan

Contents

This Operator's Manual has been prepared on the assumption that your truck is fully equipped (including all optional eqipment). Thus if you have any questions regarding equipment, please contact your authorized NISSAN dealer.

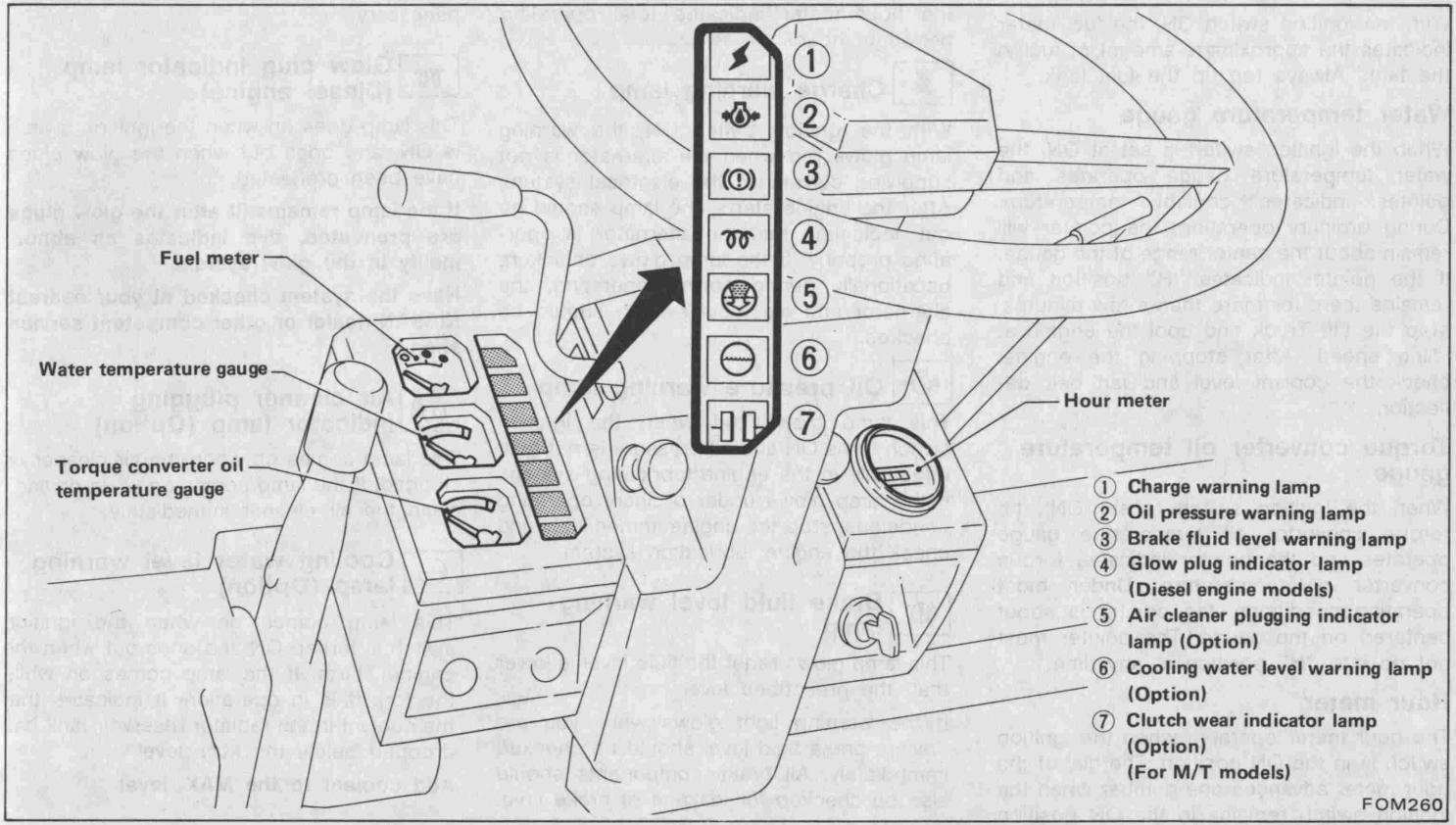
Name of Components



① Mast
② Lift cylinder
③ Control lever
④ Back rest
⑤ Fork
⑥ Overhead guard
⑦ Steering wheel
⑧ Operator's seat
⑨ Top panel
⑩ Counterweight
⑪ Rear tire
⑫ Tilt cylinder
⑬ Front tire

Instruments and Controls

METERS, GAUGES, INDICATOR AND WARNING LAMPS



Fuel meter

With the ignition switch ON, the fuel meter indicates the approximate amount of fuel in the tank. Always top up the fuel tank.

Water temperature gauge

When the ignition switch is set at ON, the water temperature gauge operates and pointer indicates coolant temperature. During ordinary operation, the pointer will remain about the center range of the gauge. If the pointer indicates "H" position and remains there for more than a few minutes, stop the Lift Truck and cool the engine at idling speed. After stopping the engine, check the coolant level and fan belt deflection.

Torque converter oil temperature gauge

When the ignition switch is set ON, the torque converter oil temperature gauge operates and the pointer indicates torque converter oil temperature. Under most operating conditions, the pointer is about centered on the gauge. The pointer must not go into "H" position at any time.

Hour meter

The hour meter operates when the ignition switch is in the ON position. The dial of the hour meter advances one number when the ignition switch remains in the ON position for an hour. Consequently, the number of the hour meter indicates total operating period of hour.

 Charge warning lamp

With the ignition switch ON, the warning lamp glows red when the alternator is not supplying current to the electrical system. After the engine starts, the lamp should go out, indicating that the alternator is operating properly. If the lamp glows or fickers occationally during normal operating, the alternator and electrical system should be checked.

 Oil pressure warning lamp

This lamp glows red when the ignition switch turns ON and oil pressure is not built effectively in the engine lubricating system. If the lamp glows under ordinary operating conditions, stop the engine immediately and check the engine lubrication system.

 Brake fluid level warning lamp

This lamp glows red if the fluid level is lower than the prescribed level.

If the warning light glows while you are driving, brake fluid level should be checked immediately. All brake components should also be checked for leakage of brake fluid. Add brake fluid or make other repair as necessary.

 Glow plug indicator lamp (Diesel engine)

This lamp goes on when the ignition switch is ON, and goes out when the glow plugs have been preheated.

If the lamp remains lit after the glow plugs are preheated, this indicates an abnormality in the glow system.

Have the system checked at your nearest NISSAN dealer or other competent service shop.

 Air cleaner plugging indicator lamp (Option)

This lamp comes on when the air cleaner is clogged. If the lamp comes on while driving, clean the air cleaner immediately.

 Cooling water level warning lamp (Option)

This lamp comes on when the ignition switch is turned ON and goes out when the engine starts. If the lamp comes on while the forklift is in operation, it indicates that the coolant in the radiator reservoir tank has dropped below the MIN. level.

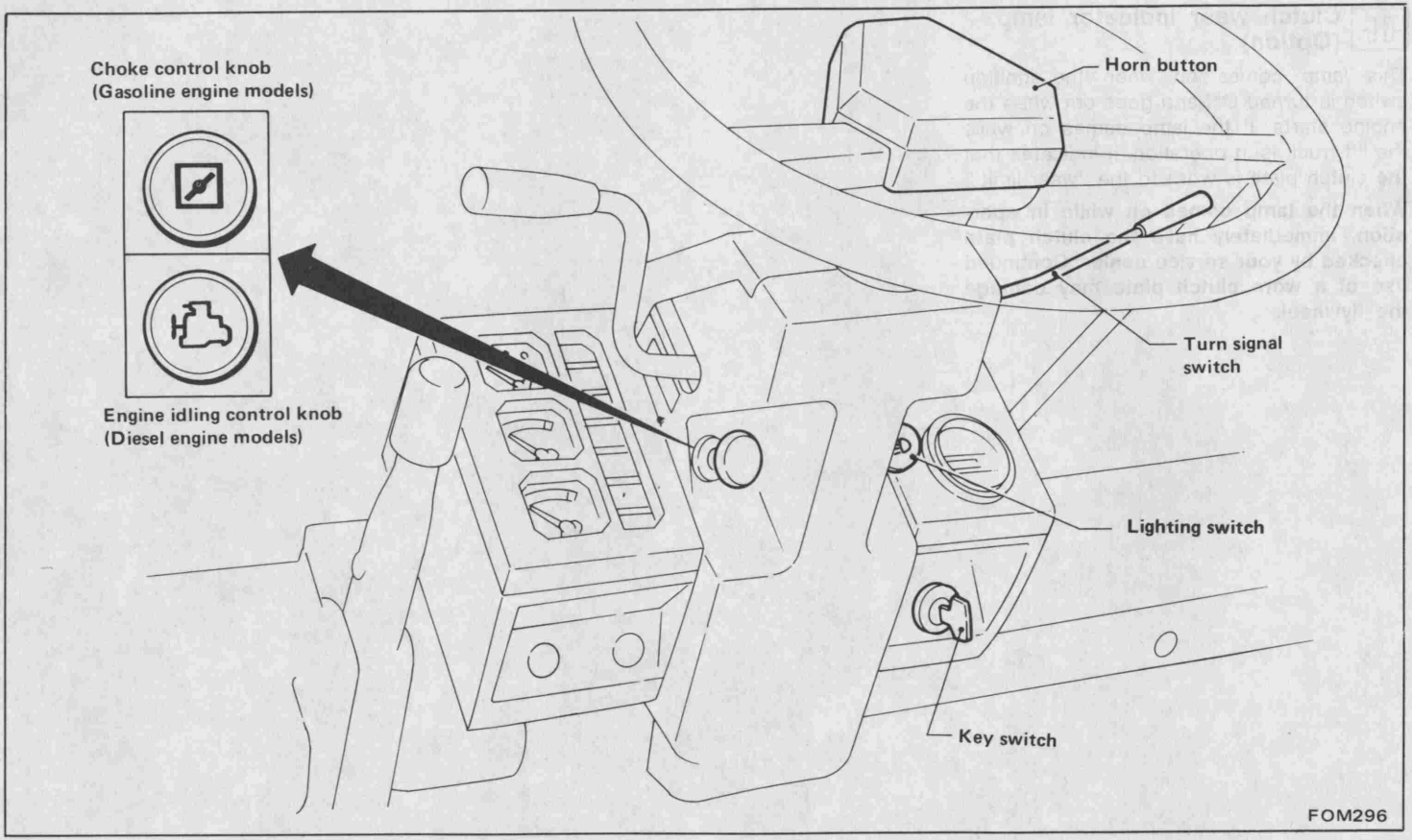
Add coolant to the MAX. level.

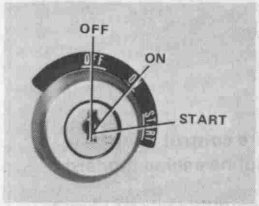
Clutch wear indicator lamp (Option)

This lamp comes on when the ignition switch is turned ON and goes out when the engine starts. If the lamp comes on while the lift truck is in operation, it indicates that the clutch plate is worn to the "wear limit."

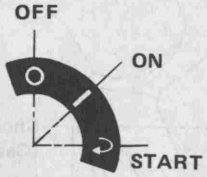
When the lamp comes on while in operation, immediately have the clutch plate checked by your service dealer. Continued use of a worn clutch plate may damage the flywheel.

SWITCHES


Choke control knob
(Gasoline engine models)
Engine idling control knob
(Diesel engine models)
Horn button
Turn signal
switch
Lighting switch
Key switch
FOM296



U.S.A. and Canada



Except U.S.A. and Canada

FOM374

Key switch

Gasoline engine and diesel engine models

The key switch controls the engine ignition system and most of electrical equipments and has three positions. The key can be inserted or withdrawn only when the key is in the OFF position

To turn on the ignition system as well as other electrical circuits, turn the key to ON position. The start position allows to start engine. After the engine has started, by releasing the key, it will automatically springback to the ON position.

Lighting switch

The switch controls the headlamps and tail lamps. When the switch is pulled out, the headlamps and tail lamps come on.

Horn button

Pushing the button in the center of the steering wheel will sound the horn, regardless of key position.

Turn signal switch

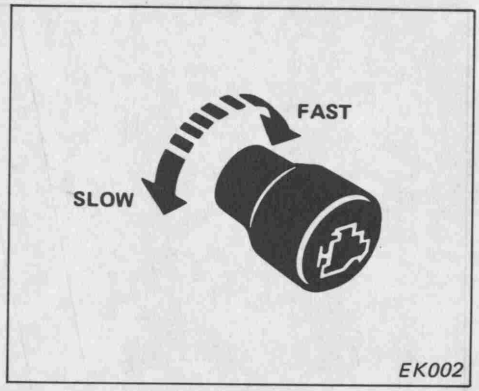
Push the switch lever forward when turning left, and pull it backward when turning right. The appropriate turn signal will blink. Upon completion of turn, be sure to return the lever to its original position.

Choke control knob (Gasoline engine)

The choke control is a Push-Pull type and located on the meter panel.

This control is used to enrich the air-fuel mixture.

Pulling out this knob, thicker mixture is provided to make engine start easier in cold weather. When the engine is fully warmed up, the knob should be pushed all the way in.



EK002

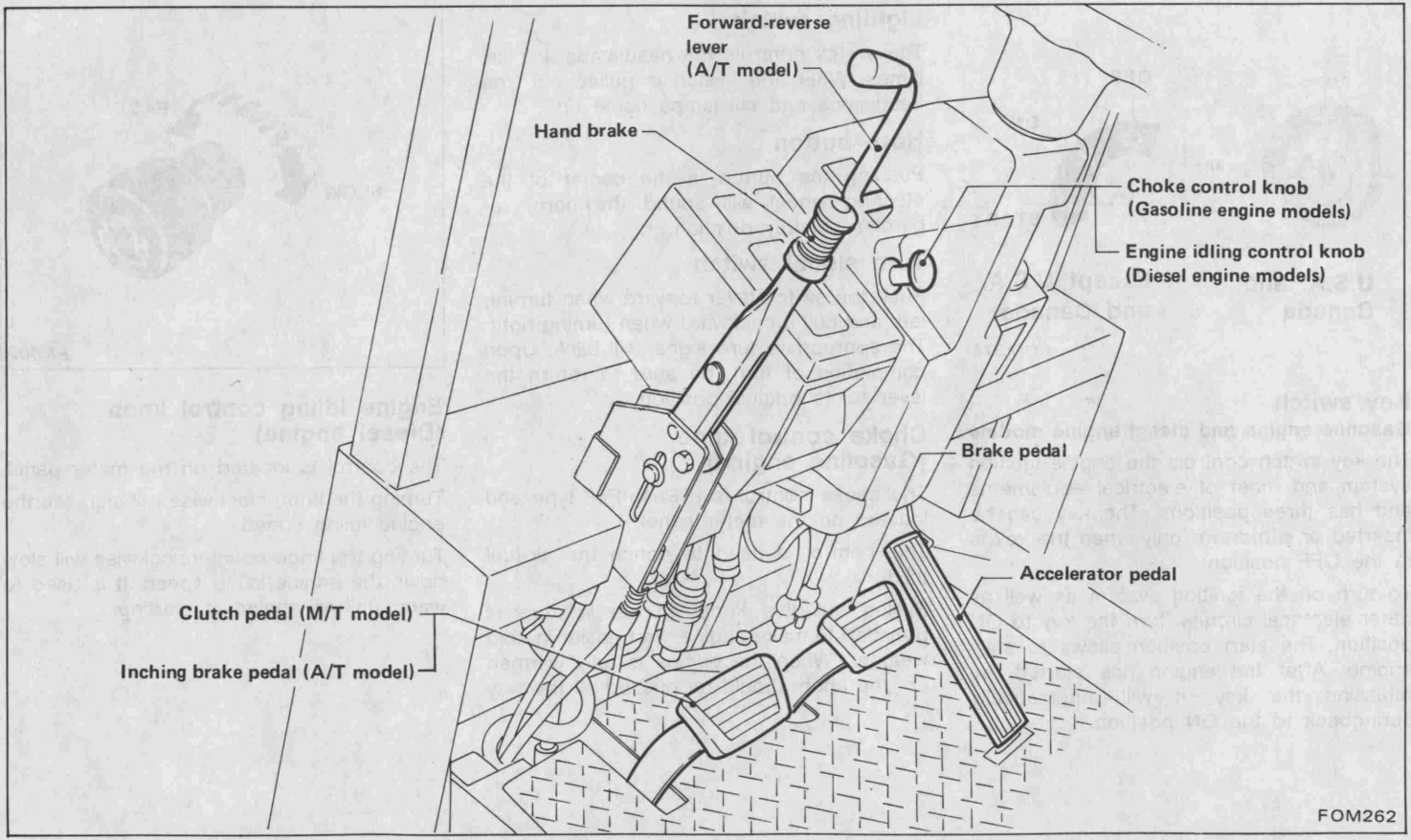
Engine idling control knob (Diesel engine)

The control is located on the meter panel.

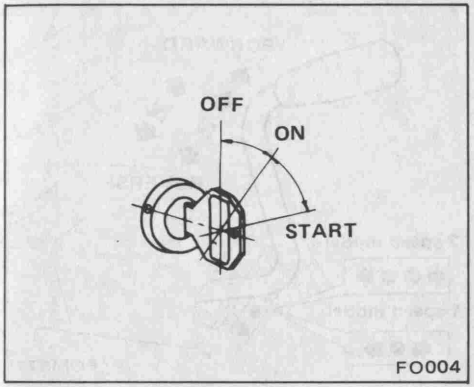
Turning the knob clockwise will increase the engine idling speed.

Turning the knob counterclockwise will slow down the engine idling speed. It is used to warm up the engine at starting.

Starting and Operating



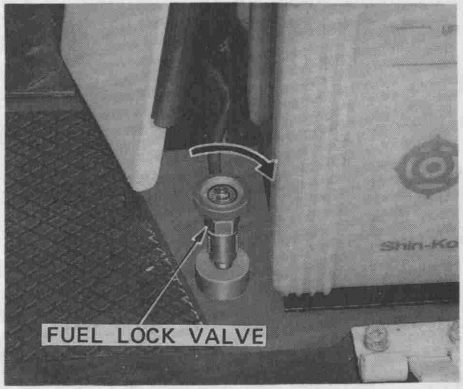
GASOLINE ENGINE



Starting

1. Check the hand brake for setting, and place the forward-reverse lever in the NEUTRAL position.
2. If necessary, pull out the choke control knob and depress the accelerator pedal and keep it depressing until the engine starts.
3. Turn the ignition key to the extreme right. Release the key as soon as the engine starts.

Do not turn the starting motor for more than 10 seconds at any time. It is not good for starter motor to run for long time.

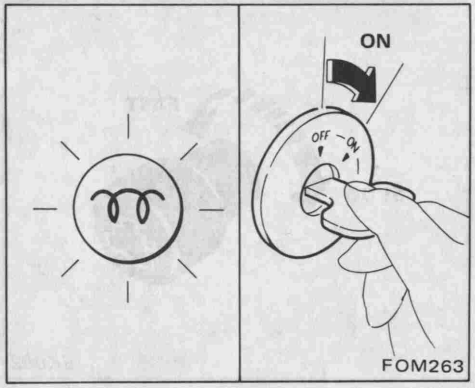


Stopping

To stop the engine, turn the ignition key to the OFF position, then engine will stop.

In emergency, lock the manual fuel lock valve in preventing fuel from flowing out from fuel tank.

DIESEL ENGINE

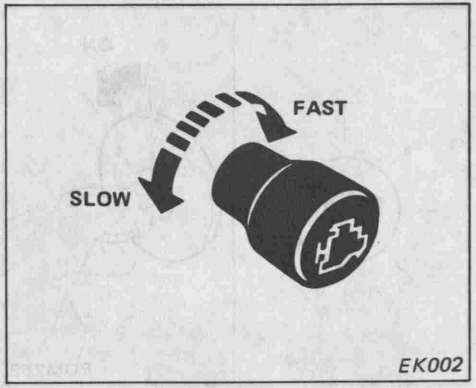


Starting

1. Set the hand brake lever and place the forward-reverse lever in the NEUTRAL position.
2. When the key switch is set to the ON position, the glow plug indicator lamp on the instrument panel goes on, indicating that engine preheating has started.

   Keep the key switch in the ON position till the glow plug indicator lamp goes out (indicates completion of preheating).

Engine preheating is controlled automatically corresponding to the engine coolant temperature, atmospheric air temperature and so forth, and the glow plug indicator lamp goes out when the engine is preheated to the specified temperature.

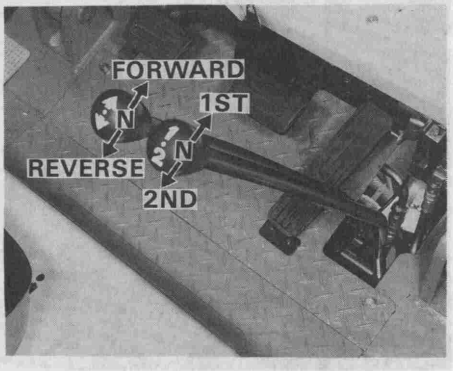


3. When the glow plug indicator lamp has gone out, turn the key switch to the START position while depressing fully the accelerator pedal, until the engine starts.
4. After the engine has started, release the accelerator pedal gradually, and turn the engine control knob clockwise until the engine runs smoothly.

Stopping

To stop the engine, turn the ignition key to the OFF position, then engine will stop.

GEARSHIFT LEVER



M/T model FORWARD-REVERSE lever and GEARSHIFT lever

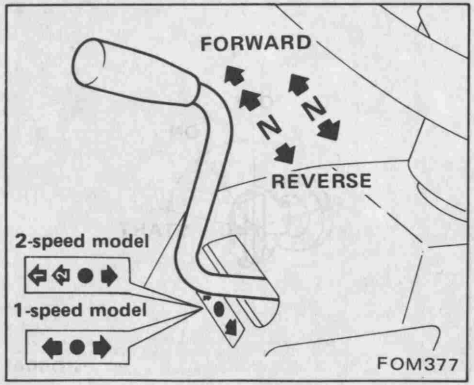
The "FORWARD-REVERSE" lever is used to make a directional change.

To move forward, push the lever forward. To back, pull the lever backward through NEUTRAL.

The "GEARSHIFT" lever permits selection of different transmission gear ratios. Pushing the lever forward places the transmission in 1st speed position.

The travel speed should be selected as required to meet the travel conditions.

Shift these levers to any desired position with the clutch pedal depressed all the way.



A/T model

This lever is used to change the direction of the lift truck, forward and reverse.

If the lever is pushed forward, the lift truck moves forward; if pulled backward, the lift truck moves backward. The midpoint between the forward and reverse positions is the neutral position. The engine must be started with the lever set in the neutral position.

Lever in forward position:
When moving the lift truck forward.

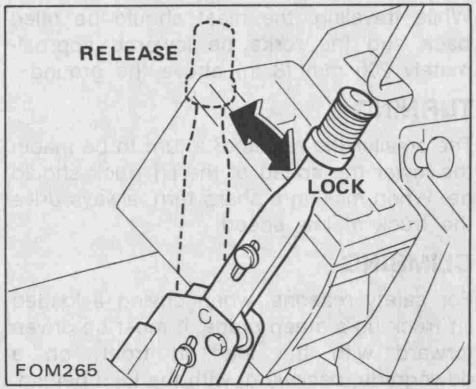
Lever in reverse position:
When moving the lift truck backward.

Lever in neutral position:
When starting the engine and parking the lift truck.

There are two types of automatic transmission models. One is a single speed model for forward and reverse. The other model has two forward speeds (high and low) and one reverse speed.

For using the two speed model, normally operate it in the high-speed range. Operate it in the low-speed range for climbing hills or when power is needed.

HAND BRAKE LEVER



To set the brake, pull the hand brake lever backward. To release the brake, push it forward. Before leaving the lift truck, be sure to apply the hand brake securely.

FOOT PEDALS

Inching brake pedal (A/T model)

This brake pedal is located on the left side of the steering column, and also works as a clutch pedal because of the inching valve built in the hydraulic system.

When the pedal is depressed slightly the engine power is disconnected. When depressed further, brake begins to operate.

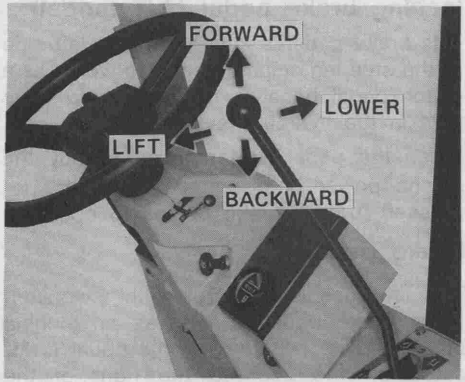
Brake pedal

This lift truck is equipped with a conventional brake pedal as well as an inching brake pedal. The conventional pedal is located on the floor to the right of the steering column.

Accelerator pedal

The accelerator pedal is located in a convenient position to the right of the steering column.
(Refer to page 8 for the pedal location.)

LIFT-TILT CONTROL LEVER



The lift-tilt control lever is used either to tilt the mast forward or backward and to lift or lower the forks. Positions of the lever are marked on the instrument panel.

When two different operations are required to perform at once, the lever should be pushed midway between the two positions.

TRAVELING

While traveling, the mast should be titled back and the forks be lowered approximately 200 mm (8 in) above the ground.

TURNING

The smaller the radius of a turn to be made, the lower the speed of the lift truck should be. When making a sharp turn, always drive the truck at low speed.

CLIMBING

For safety reasons, when driving a loaded lift truck up a steep grade, it must be driven forward with the load in front; on a downgrade, backward, with the load behind.

On NISSAN Forklifts equipped with an automatic transmission, standing starts and stopping on a slope can be accomplished safely and easily by manipulating the accelerator and brake pedals as required.

For stopping, the brake pedal should be used.

For traveling, depress the accelerator pedal.

To make a standing start on a slope, the hand brake can be utilized in place of the brake pedal.

STOPPING AND PARKING

To stop the lift truck, remove foot from the accelerator pedal and step on the brake pedal. Do not make sudden stops as the truck will pitch forward and drop load.

WARNING:

When leaving the lift truck, set the hand brake, adjust the mast to an upright position, lower the forks until they rest on the ground and turn off the key.

Loading and Unloading

LOADING

Adjust distance between the forks symmetric to the center line of the lift truck. The wider the interval between forks, the better the balance. Be sure to apply the fork stoppers after setting the forks.

Approach slowly, straight toward the load, and stop just in front of it. Adjust mast to vertical position, matching the height of the forks to the position of the pallet. Advance slowly and completely insert forks beneath the load. Set the forward-reverse lever to NEUTRAL and apply the hand brake. Then raise the load. Confirm that the load is stable and tilt it backward. Release the hand brake and back the lift truck slowly.

TRANSPORTATION

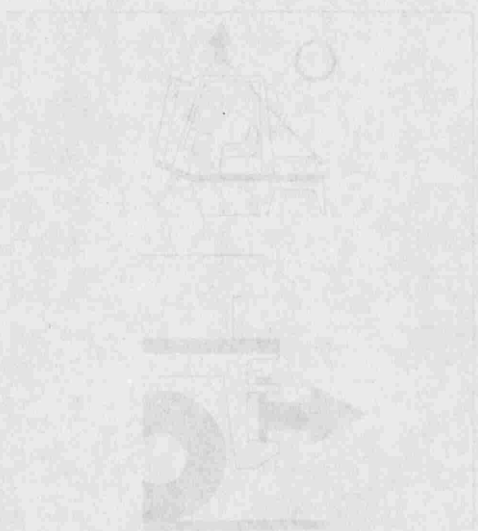
When transporting loads, the lift truck should be driven carefully at slow speed with the load kept low and tilted back. When the load is big enough to block forward visibility, drive the lift truck backward. Follow the safety rules.

UNLOADING

Slowly approach the unloading site and stop facing straight ahead.

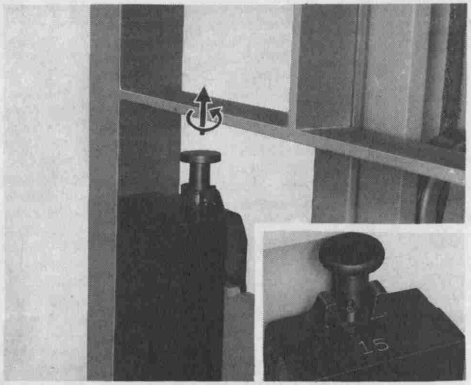
Move the forward-reverse lever into NEUTRAL and apply the hand brake. After adjusting the mast to the vertical position, raise the load a little above the stack on which it is to be placed. Release the hand brake and advance slowly into the proper position for stowing. Apply the hand brake and place the forward-reverse lever in NEUTRAL.

Slowly lower the forks to set down the load. After moving the forward-reverse lever to REVERSE, release the hand brake and back the lift truck up until the forks separate completely from the load.



Other Handling and Operations

FORKS



The fork-to-fork distance can be properly adjusted by unlocking the lock pins on the forks. These pins are unlocked by pulling them up and turning 90° in either direction. Forks must be equally located from the center of the lift truck. After correct fork-to-fork distance is obtained, secure the forks with the lock pins.

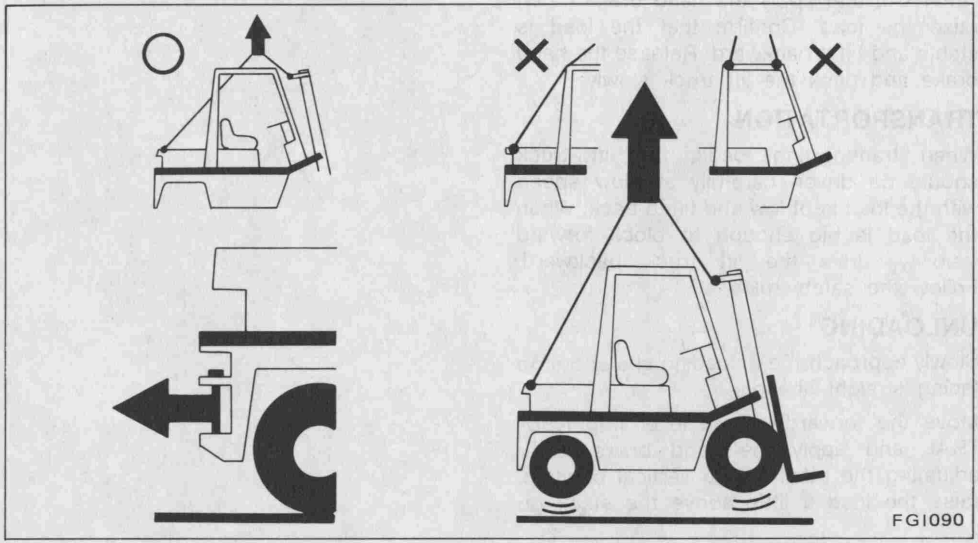
Various kinds of forks are available depending on the lifting capacity. Select proper forks so that the specifications stamped on the upper face of them may meet the lifting capacity of your lift truck (i.e., above lifting capacity). Never use forks below the lifting capacity of your lift truck.

LIFTING UP FORKLIFT TRUCK

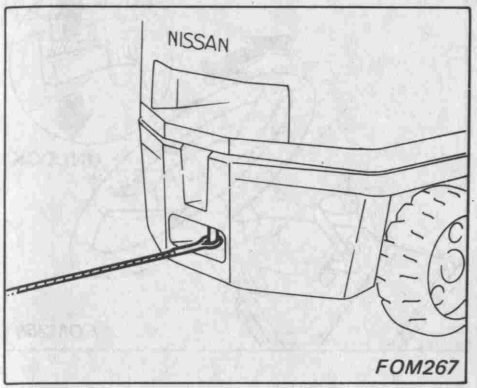
When lifting the entire forklift truck, secure wire ropes to holes on both sides of the outer mast cross beam and to the hook on the counterweight, and then utilize a lifting device.

WARNING:

- **Make sure that the wire ropes do not interfere with the overhead guard while lifting the truck.**
- **Ensure that the wire ropes and lifting device are strong enough to support the lift truck safely, as the lift truck is extremely heavy.**
- **Do not use the cab frame (overhead guard) to lift up the truck.**
- **Never get under the lift truck while lifting the truck.**

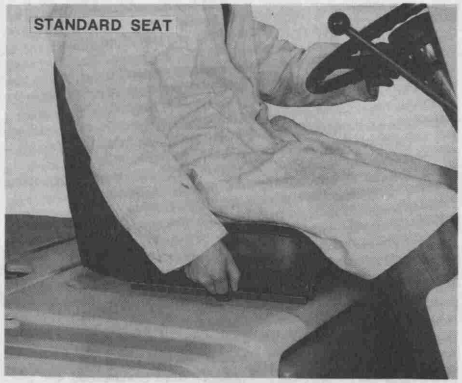


TRACTION BAR



Use the traction bar when pulling or dragging an object.

SEAT ADJUSTMENT



Fore-and-aft control lever

The fore-and-aft control lever is located to the right of the seat slider.

To adjust the seat position, push the lever backward and hold it there while sliding the seat forward or backward to the desired position.

Release the lever to lock the seat.

Before operating the lift truck, be sure the seat is locked securely.

①Reclining lever

The reclining lever allows the operator to set the seatback in the optimum driving position. To adjust the seatback, pull the reclining lever and set the seatback to the desired position. The seatback locks when the lever is released.

②Weight control dial

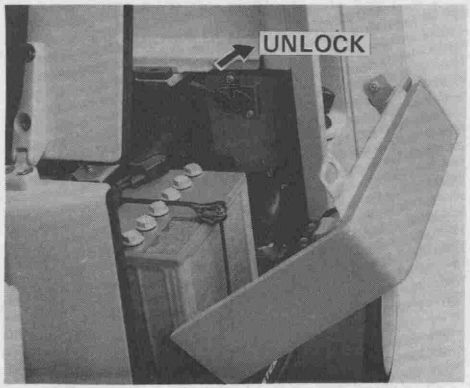
The weight control dial is located on the lower right side of the driver's seat. It adjusts the tension of the seat cushion to his weight. To adjust, set the dial to the weight of the operator.

TOP PANEL

To open, lift up the end of the top panel, and the top panel will stop with the balancer.

To close, lower the top panel carefully.

SIDE PANEL



The side panel can be opened after opening the top panel and unlocking the lock lever.

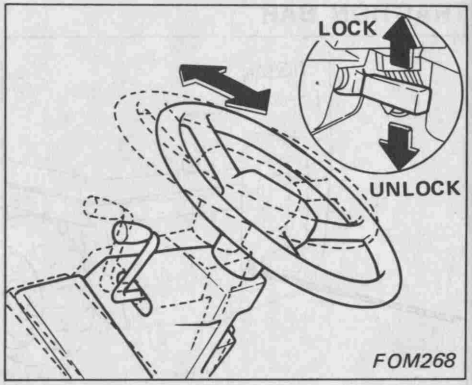
Ensure that the lock is engaged properly when the side panel is closed.

The side panel can be easily detached.

WARNING:

Do not operate the lift truck without side panels.

TILT STEERING WHEEL



The position of the steering wheel can be adjusted. To adjust, push down on the lever located on the left side of the steering column, and move the wheel to the desired position. After selecting the wheel position, pull up down on the lever fully to lock.

WARNING:

a. Be sure to adjust the steering wheel position while the lift truck is stationary.

b. After adjustment, force the steering wheel upward or downward to assure it is locked securely.

AGAINST COLD AND HOT WEATHER

In cold weather

● Oil and grease

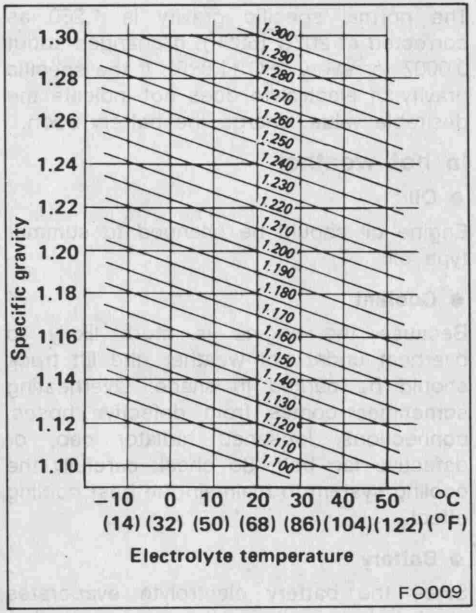
Use engine oil and grease suitable for ambient temperature. (Refer to RECOMMENDED LUBRICANTS.)

● Coolant

When coolant might freeze under low ambient temperature, drain out the coolant completely. In such cold weather, it is recommended to mix anti-freeze solution into the cooling system.

Anti-freeze: [Example]

Coolant capacity	Anti-freeze		
	0.8 liter (7/8 US qt, 3/4 Imp qt)	1.7 liters (1-3/4 US qt, 1-1/2 Imp qt)	2.5 liters (2-5/8 US qt, 2-1/4 Imp qt)
5.0 liters (5-1/4 US qt, 4-3/8 Imp qt)	−7°C (19°F)	−18°C (0°F)	−35°C (−31°F)



● Battery

Battery should not be left in discharged state. When battery performance becomes questionable, check the specific gravity of the electrolyte, terminals of battery and alternator.

The normal specific gravity is 1.260 as corrected at 20°C (68°F). It changes about 0.0007 for every 1°C (1.8°F). If the specific gravity of electrolyte does not indicate the desirable value, charge the battery soon.

In hot weather

- **Oil**

Engine oil should be changed to summer type oil.

- **Coolant**

Because the engine is more likely to overheat under hot weather, the lift truck should be parked in shade. Overheating sometimes comes from defective hoses, connections, loosened radiator cap, or defective fan belt. So check carefully the cooling system to maintain the best cooling effect.

- **Battery**

Since the battery electrolyte evaporates much in hot weather, it is necessary to top up distilled water frequently.

Safety Rules

Operator must be trained and authorized to drive the lift truck, and must understand safety technics and rules for lift truck operation.

Inspect the lift truck before operating. Do not operate lift truck if it is in need of repair. If it is in need of repair, tag the lift truck, remove the key, and report the condition to the proper authority. Do not attempt repair unless you are trained and authorized for repairing.

Do not remove overhead guard or backrest unless specifically authorized.

Make sure that forward-reverse lever is set in neutral and hand brake is applied before starting the engine. Do not start or operate the lift truck if you are not in designated operator's position.

Do not allow anyone on any part of the lift truck while moving or lifting.

FOM254

Keep hands, feet and other parts of your body inside the operator's compartment all the times.

Do not allow anyone to stand or walk under the elevated portion of the lift truck whether it is empty or loaded.

FOM297

Always carry loads low with the mast tilted to the backmost position. Do not elevate loads except during stacking.

FOM298

Maintain a careful lookout for people and obstructions, and watch the path of travel. Watch clearances, especially overhead and tail swing. When visibility is obstructed, use extreme caution.

If the load obstructs the front view, drive the lift truck in reverse.

Do not overload lift truck. Check the load chart for load weight and load center information. Always pick up loads as close to weight center as possible to avoid off-center loading.

FOM255

Avoid sudden starts, stops or turns. Slow down for turns and on uneven or slippery surfaces that could cause lift truck to overturn or slide.

FOM299

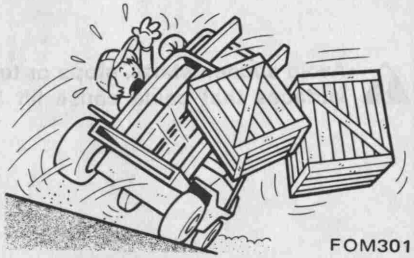
Use special care when traveling without load as risk of lateral overturn may be greater than when traveling with load.

Before entering trucks or trailers, be certain the brakes on the truck or trailer are applied and the wheel chocks are in place or trailer is locked to the loading dock.

Before driving over a dockboard or bridge plate, be certain that it is properly secured. Drive carefully and slowly across the dockboard or bridge. Never exceed its rated capacity.

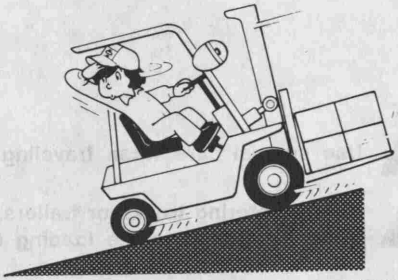
FOM300

Use special care when operating on slopes. Travel slowly and do not angle across or turn.



FOM301

When ascending or descending slopes, drive the lift truck with the load facing upgrade.



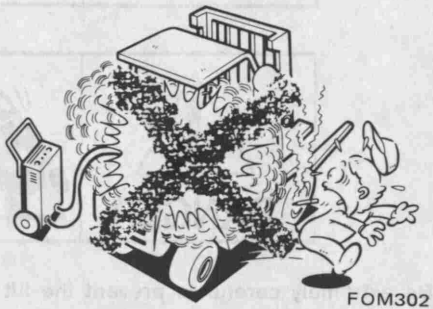
FOM258

Do not handle unstable or loosely stacked loads. When handling long, high or wide loads, use special care to ensure stability and carefully watch the surrounding conditions.

When approaching cross aisles, slow down, and sound horn if visibility is obstructed.

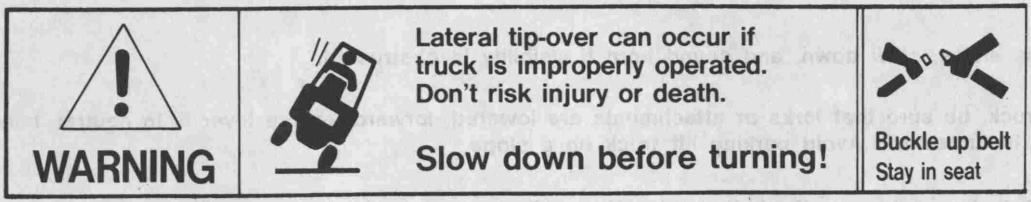
Before leaving the lift truck, be sure that forks or attachments are lowered, forward-reverse lever is in neutral, hand brake is applied and key switch is turned off. Avoid parking lift truck on a slope.

When filling the tank with fuel or recharging the battery, stop the engine and place the lift truck only in designated area with good ventilation. Keep away from arcs, spaks, flames or lit cigarettes.



FOM302

IN CASE OF TIP-OVER



FOM358

Be extremely careful to prevent the lift truck from tipping over during operation. Slow down the lift truck sufficiently when turning a corner or tight curve.

The following precautions should be closely observed to ensure safe operation of the lift truck as well as to protect personnel against injury.

Always make sure that your seat belt is securely fastened and the top panel latch is in the locked position.

If the lift truck begins to tip, DO NOT ATTEMPT TO JUMP CLEAR. The lift truck will fall faster than you can jump. Brace your feet and hold yourself inside the operator compartment by holding onto the steering wheel with both hands.

Daily Care

DAILY CARE

To maintain your lift truck in proper condition, ready for safe operation, be sure to perform the daily checks indicated below. **If you note any abnormality, notify your authorized NISSAN dealer.**

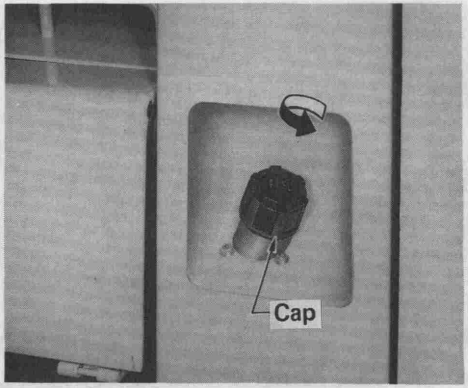
Do not operate the lift truck if it is in need of repair.

1. Check engine oil level.
2. Check engine coolant level, and also check engine cooling system for leakage.
3. Check battery fluid level in each cell.
4. Check leakage and amount of brake fluid.
5. Check steering wheel play.
6. Check automatic transmission oil level and leakage.
7. Check hydraulic oil level and oil line leaks.
8. Check fuel line (hoses pipings, connections) for leaks.
9. Check water separator of fuel filter. If necessary, drain water from water separator.
10. Check tire pressure and check for looseness, wear or damage of wheel nuts and bolts.

    Remove objects that are embedded in the tread.
11. Check operation of horn, headlight and all indicators.
12. Check operation of hydraulic control valve.
13. Check the mast operation for the following items:

- Smooth lifting and lowering
- Smooth roller rotation
- Wear or damage to chains
- Lift bracket and forks for bend and damage

14. Check safety start system operation.
15. Check brake pedal operation.
16. Check hand brake operation.
17. Check the back rest and overhead guard for proper installation and function.
18. Check fork latches.
19. Check forks for cracks, breaks, bend and wear.

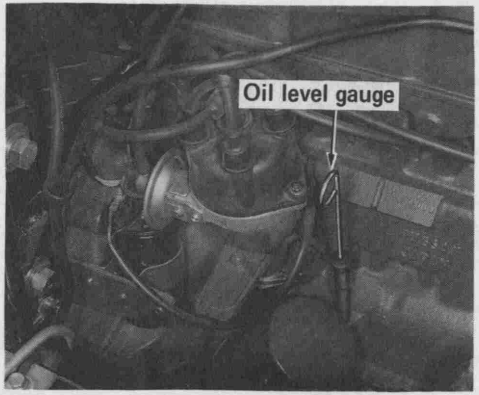


Fuel recommendation

The fuel inlet is located on the left rear side of the overhead guard pillar. At the end of each day's run, top up the tank with fuel.

Gasoline to be used

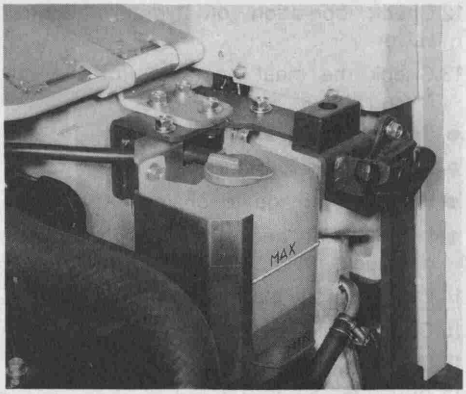
- Except for U.S.A., Canada and Germany: Regular
- For Germany: Normal gasoline leaded DIN 51 600 or normal unleaded DIN 51 607.
- For U.S.A. and Canada: Unleaded



Engine oil level

To check oil level, pull out the level gauge, wipe it clean and reinsert; remove it again to read oil level.

The level should be between the "L" and "H" marks.



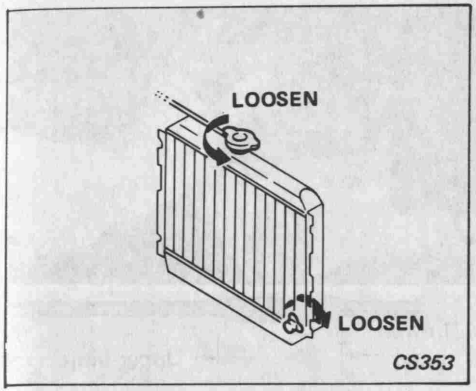
Engine coolant level

Visually check the amount of coolant in the reservoir tank when the engine is cold. If the coolant level is below the "MIN" level, remove the reservoir tank filler cap and add coolant until the "MAX" level is reached. If the reservoir tank is empty, check the coolant level in the radiator. If there is insufficient coolant in the radiator, pour coolant into the radiator up to the cap and also pour it into the reservoir tank up to the "MAX" level. If it becomes necessary to repeatedly add coolant, your cooling system should be inspected by a NISSAN dealer or other competent service shop.

⚠ WARNING:

Never remove the radiator cap when the engine is hot; serious burns could be caused by high pressure fluid escaping from the radiator.

Wrap a thick cloth around cap and carefully remove the cap by turning it a quarter turn to allow built-up pressure to escape and then turn the cap all the way off.



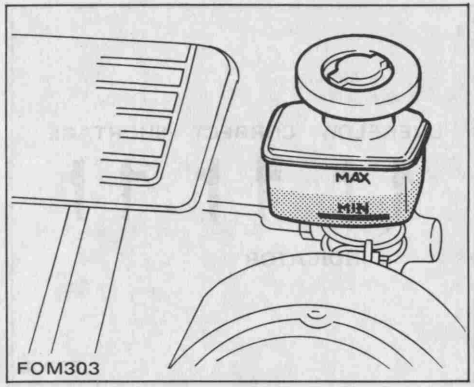
Changing engine coolant

1. Open the radiator cap and drain cock to drain the coolant. Then flush the cooling system.
2. Close the drain cock securely.
3. Fill the radiator with new coolant up to the filler opening. Fill the reservoir tank up to the "MAX" level. Then put on the radiator cap.
4. Run the engine sufficiently.
5. Stop the engine and after it completely cools down, refill the coolant up to the radiator filler opening. Fill the reservoir tank up to the "MAX" level with coolant.
6. Check the drain cock for any sign of leakage.

⚠ WARNING:

To avoid the danger of being scalded, never attempt to change the coolant when the engine is hot.

Refer to page 16 for the proper mixing ratio of anti-freeze solution to cooling water.

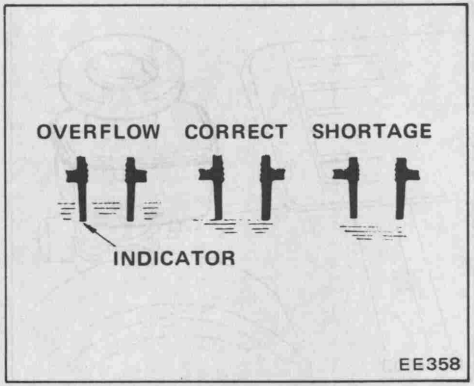


Brake fluid level

Visually check the amount of brake fluid in the reservoir.

⚠ WARNING:

Use DOT3 (F.M.V.S.S. No. 116) brake fluid only.

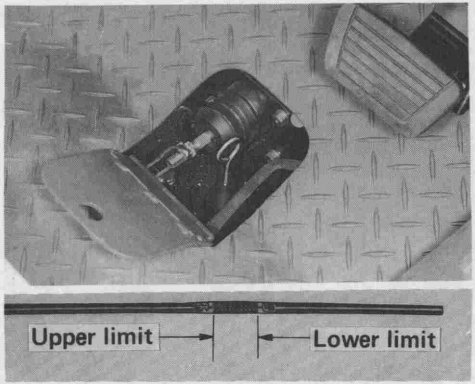


Battery fluid level

Check the fluid level in each battery cell.

If necessary, add only distilled water to bring the level to the indicated point. Do not overfill.

The battery surface should be clean and dry. Periodically apply a small amount of grease to each terminal to prevent corrosion formation.



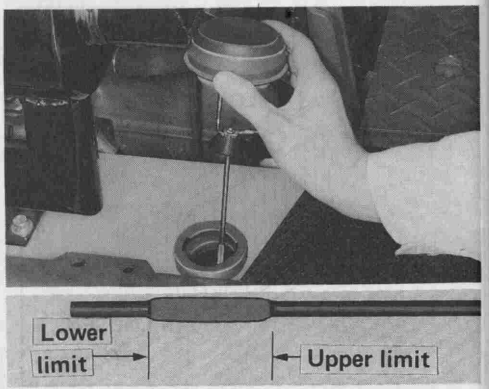
Automatic transmission oil level

Check the automatic transmission oil level.

The oil level gauge is accessible after opening the lid on the floorboard.

The oil level should be between the upper and lower level marks on the gauge rod.

To check the oil level, park the lift truck on a level surface, run the engine with the transmission in Neutral and raise the A/T oil temperature to 30 to 70°C (86 to 158°F). Then stop the engine and read the oil level indicated on the gauge rod.



Hydraulic oil

Check the oil level in the hydraulic oil tank.

The oil level should be between the upper and lower level marks on the gauge rod.

Steering wheel

Turn the steering wheel to the right and left; a play in circumference of less than 10 mm (0.39 in) at idling is normal.

If there is excessive play or looseness, have the steering wheel adjusted by a NISSAN dealer or other competent service shop.

Wheel and tire

Maintain the correct tire pressures by checking frequenctly with an accurate tire gauge.

Inflate tires to the correct pressure if necessary

Tire pressure:

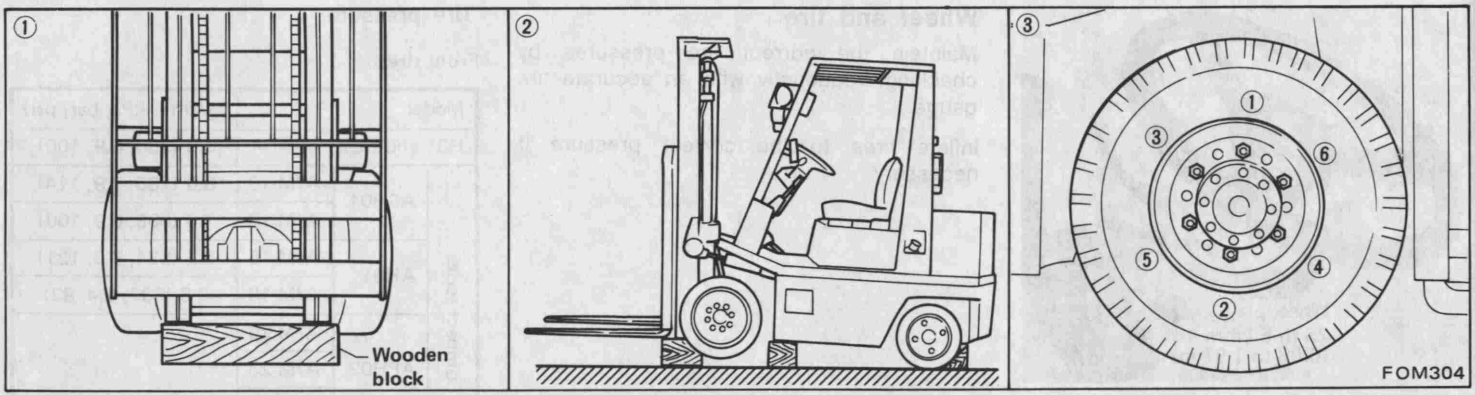
Front tire

Model			kg/cm² (kPa, bar, psi)
H01 and H02			7.0 (686, 6.9, 100)
Compact series	ASH01	A/M 10	8.0 (785, 7.9, 114)
		A/M 13	7.0 (686, 6.9, 100)
	AH01	A/M 15	8.5 (834, 8.3, 121)
		A/M 18	6.5 (637, 6.4, 92)
	APH02	A/M 20	9.0 (883, 8.8, 128)
		A/M 23	
		A/M 25	
	AEH02	A/M 20	
		A/M 23	
		A/M 25	

Rear tire

All models	7.0 (686, 6.9, 100)

Tire replacement



Front tire

1. Place the lift truck on a level and solid surface.
2. Start the engine and raise the carriage about 100 mm (3.94 in).
3. Place chocks behind the rear wheels to prevent movement of the lift truck.
4. Loosen the wheel nuts one or two turns each by turning them counterclockwise.
5. Tilt the mast fully backward, place a wooden block under each side of the outer mast.
6. Tilt the mast forward until the front tires are raised from the surface.

⚠ WARNING:

Do not remove wheel nuts until the front tires are raised from the ground.

7. Support the lift truck by putting additional wooden blocks under each side of the front-end frame as shown in the above illustration. Stop the engine.
8. Remove the wheel nuts and replace the front tire.

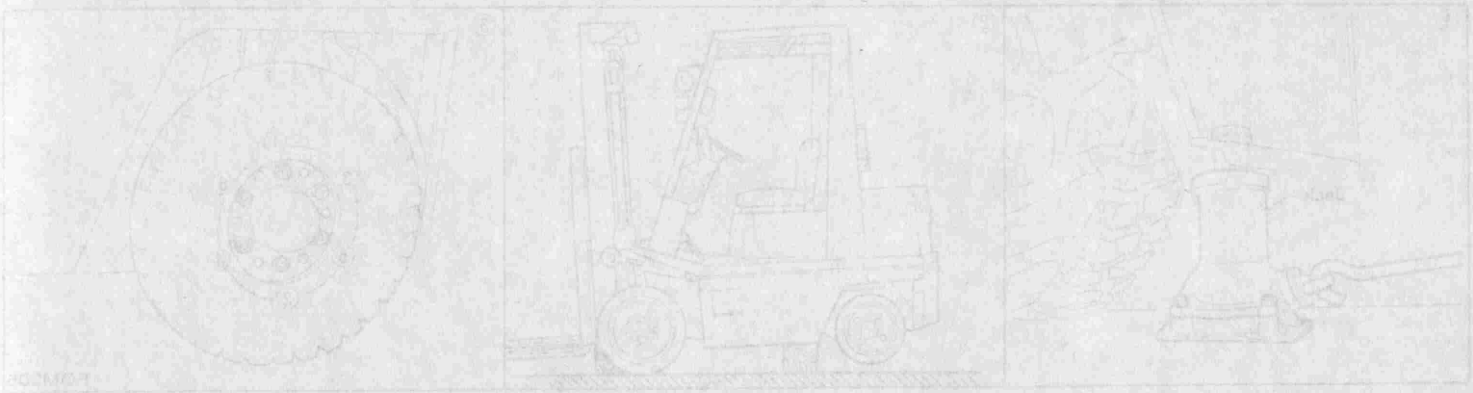
⚠ WARNING:

a. When removing the tire from the wheel rim, do not remove rim set bolts and nuts before releasing air.

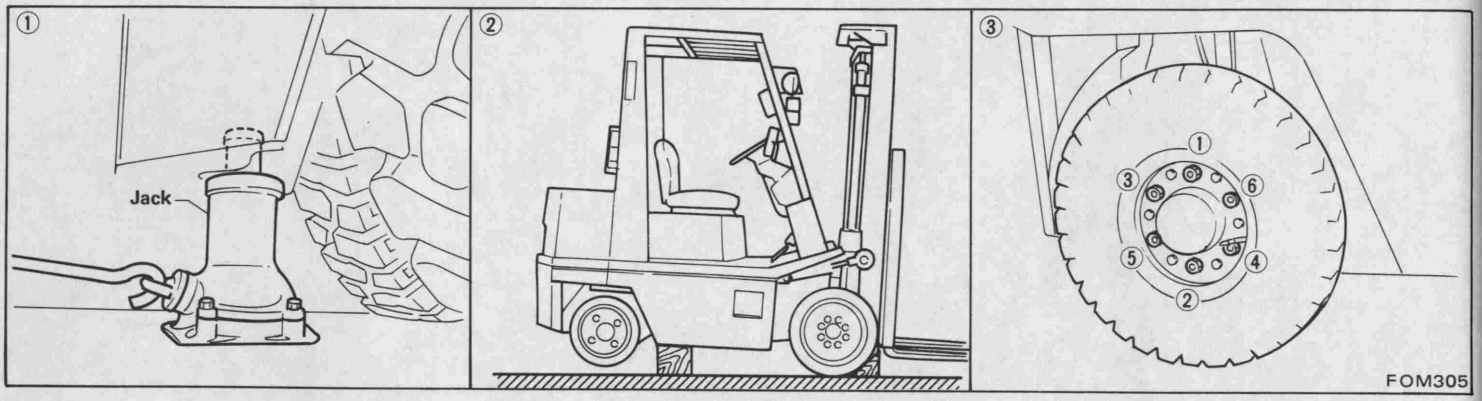
b. Make sure that the wooden blocks used to support the lift truck are solid and one-piece units.

c. Never get under the lift truck while it is supported only by the wooden blocks.

9. Reinstall the wheel nuts and temporarily tighten them in the sequence shown in the above illustration.
10. Start the engine and remove the wooden blocks from the underside of the frame.
11. Lower the lift truck slowly by tilting the mast fully backward. Remove the wooden block from the underside of the mast, and remove the chocks.



12. Tighten the wheel nuts to the specified torque in a crisscross fashion. Refer to the "Tightening torque" table on page 34.
13. Adjust the tire pressures to the value specified in the "Tire pressure" table on page 29.



Rear tire

Cushion tire

WARNING:

Contact properly trained personnel, Nissan dealer or other competent service shop.

Pneumatic tire

1. Place the lift truck on a level and solid surface.
2. Apply the hand brake, and place chocks behind the front tires to prevent the movement of the lift truck.
3. Place the jack under the cutout portion at the bottom of the counterweight, as shown in the above illustration.

Make sure that the jack has a capacity of at least 2/3 of the total weight of the lift truck as shown on the model number plate.

4. Loosen the wheel nuts one or two turns each by turning them counterclockwise.

WARNING:

Do not remove wheel nuts until the rear tires are raised from the ground.

5. Jack up the lift truck slowly until the rear tires clear the ground, and support the lift truck by putting wooden blocks under each side of the rear end frame as shown in the above illustration.
6. Remove the wheel nuts and replace the rear tire.

WARNING:

a. When removing the tire from the wheel rim, do not remove rim set bolts and nuts before releasing air.

b. Make sure that the wooden blocks used to support the lift truck are solid and one-piece units.

c. Never get under the lift truck while it is supported only by the wooden blocks.

7. Reinstall the wheel nuts and temporarily tighten in the sequence shown in the above illustration.

8. Remove the wooden blocks and lower the lift truck slowly until the rear wheel touches the ground. Then remove the chocks and the jack.
9. Tighten the wheel nuts to the specified torque in a crisscross fashion. Refer to the "Tightening torque" table on page 34.
10. Adjust the tire pressure to the value specified in the "Tire pressure" table on page 29.

Tightening torque:

Unit: N·m (kg-m, ft-lb)

Model			H01 series	H02 series	
			1.0 t - 1.75 t	2.0 t - 2.5 t	2.75 t - 3.5 t
Cushion-tire model	Front		127 to 147 (13 to 15, 94 to 108)	196 to 245 (20 to 25, 145 to 181)	245 to 294 (25 to 30, 181 to 217)
	Rear		–	–	–
Pneumatic-tire model	Front	Single tire	127 to 147 (13 to 15, 94 to 108)	245 to 294 (25 to 30, 181 to 217)	441 to 588 (45 to 60, 325 to 434)
		Double tire	Ⓑ 127 to 147 (13 to 15, 94 to 108)*1	Ⓑ 245 to 294 (25 to 30, 181 to 217)*1	Ⓝ 539 to 686 (55 to 70, 398 to 506)*1
			78 to 98 (8 to 10, 58 to 72)*2	245 to 294 (25 to 30, 181 to 217)*2	588 to 736 (60 to 75, 434 to 542)*2
			127 to 147 (13 to 15, 94 to 108)*3	245 to 294 (25 to 30, 181 to 217)*3	343 to 441 (35 to 45, 253 to 325)*3
	Rear		78 to 98 (8 to 10, 58 to 72)	127 to 147 (13 to 15, 94 to 108)	

Ⓑ : Bolt
Ⓝ : Nut
*1 : Inner wheel
*2 : Outer wheel nut
*3 : Hub nut (Outer hub)

Tightening torque:

Compact series (Front)

Unit: N·m (kg-m, ft-lb)

ASH01	78 to 98 (8 to 10, 58 to 72)
AH01	127 to 147 (13 to 15, 94 to 108)
AH02	196 to 245 (20 to 25, 145 to 181)

Checking horn

Check the horn for proper operation.

Checking lights

Make sure that lights go on when switches are placed into the "ON" positions.

Checking 'LIFT-TILT" control lever

Increase the engine speed and check the "LIFT-TILT" control lever for proper operation in the following manner.

Manipulate the control lever to insure that the forks are lifted, lowered, or tilted forward and backward properly.

Check the rollers for proper rotation.

Checking mast and forks

Check the mast and forks to insure that:

a) The forks are secured in their proper positions.

b) No oil leakage occurs at and around the lift and tilt cylinders.

c) Checking the chain anchors and pins.

Checking chains

Check the lift chains for cracks or broken links and pins.

Checking area around fuel tank

When performing daily care before operating the forklift, also check the area around the fuel tank.

- Check for fuel drops (gasoline or light oil) on the floor where the forklift is parked.
- Check for fuel leakage at the drain plug of the fuel tank (underside of the left frame).
- Check for fuel leakage where the fuel tank and fuel neck join (upper side of the left frame). (Except F05 pneumatic tire models)
- Check for fuel leakage where the fuel gauge is mounted (upper side of the left frame).

If any of the above conditions are found, stop operating the forklift immediately and contact the nearest NISSAN dealer or competent service facility.

Drain plug

Remove the drain plug before washing the inside of the fuel tank. To do this, turn the drain plug counterclockwise.

- When removing the drain plug, be careful not to lose the packing. Before installing the drain plug, be sure to install the packing.

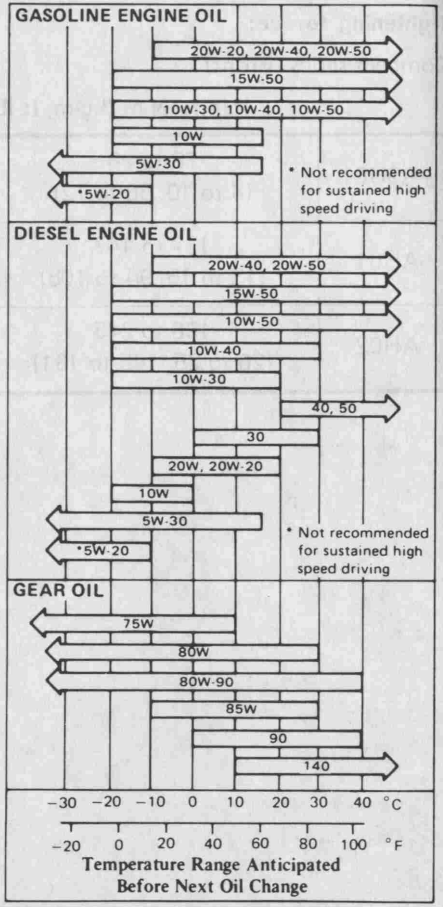
Tightening torque:
25 - 39 N·m (2.5 - 4.0 kg-m, 18 - 29 ft-lb)

Maintenance

RECOMMENDED LUBRICANTS

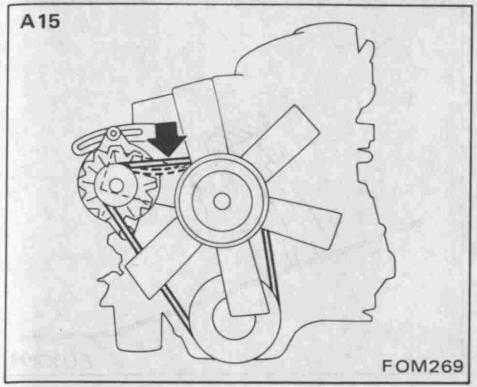
Item		Specifications	Remarks
Engine oil	Gasoline	API SD or SE	Refer to Recommended SAE Viscosity Chart.
	Diesel	API CC or CD	
Gear oil	Transmission	API GL-4	
	Differential	API GL-4	
Grease	Chassis	N.L.G.I. 1	Lithium soap base
	Wheel bearing	N.L.G.I. 2	
	Mast and chain guide bar	N.L.G.I. 2	Graphite base
Power steering oil		Hydraulic oil SAE No. 10W	–
Hydraulic oil		Hydraulic oil SAE No. 10W	Wear-proof oil
Automatic transmission (Torque converter) oil		Type DEXRON or M2C-33E or F	–
Brake fluid		DOT3 (F.M.V.S.S. No. 116)	F.M.V.S.S.: Federal Motor Vehicle Safety Standard
Anti-freeze		–	Permanent anti-freeze (Ethylene glycol base)

RECOMMENDED SAE VISCOSITY NUMBER



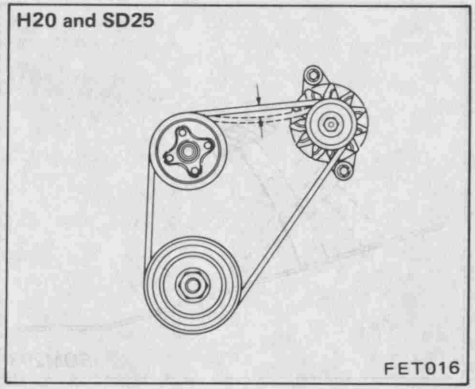
ENGINE

A15



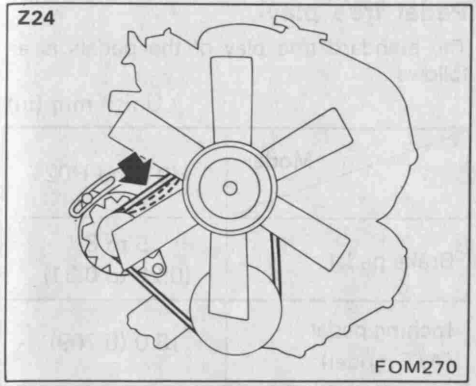
FOM269

H20 and SD25



FET016

Z24



FOM270

Fan belt

Check the belt deflection by applying moderate thumb pressure at a point midway between the pulleys. If necessary, adjust the belt deflection.

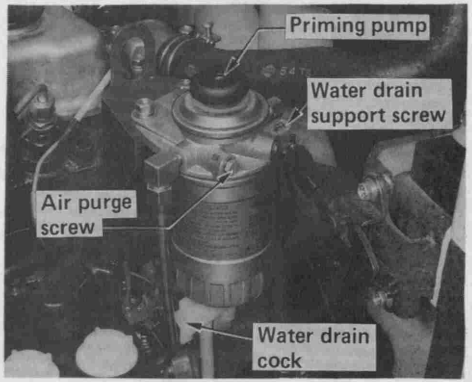
Fan belt deflection:
8 to 12 mm (0.31 to 0.47 in)

WARNING:

a. Be sure the engine is not running and the hand brake is applied securely.

b. Keep the hands clean.

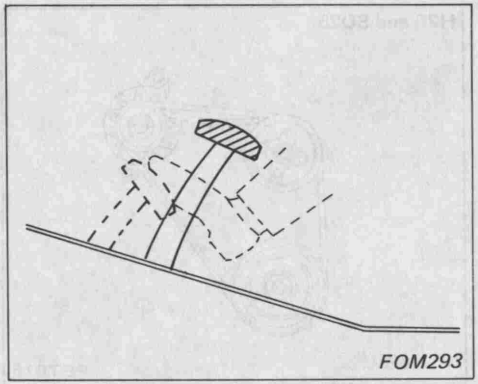
WATER SEPARATOR

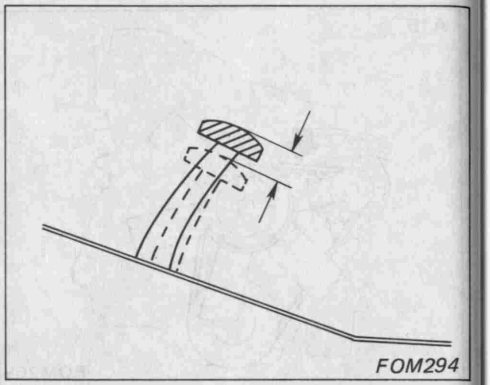


Draining water from water separator (Diesel engine)

If the filter warning buzzer sounds while the engine is running, drain any water that is in the fuel filter. Proceed as follows:

1. Place a container under the fuel filter.
2. Loosen the water drain support screw and the water drain cock 4 to 5 turns to drain water.
3. After the water has been completely drained, tighten the water drain support screw and drain cock.





Air purge (Diesel engine)

When refilling empty fuel tank and/or draining water from water separator, purge the air out of fuel system. Proceed as follows:

1. Loosen the air purge screw.
2. Move the priming pump up and down until no further air-bleed comes out of the air purge screw.
3. Tighten the air purge screw.

Brake pedal

When the engine is running and the brake pedal is fully depressed, the distance between the upper surface of the pedal pad and floor board should be 60 mm (2.36 in) or more.

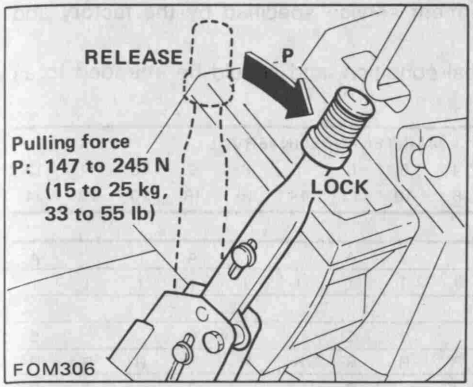
When this distance approaches the prescribed limit value, have the brake adjusted by a NISSAN dealer or other competent service shop.

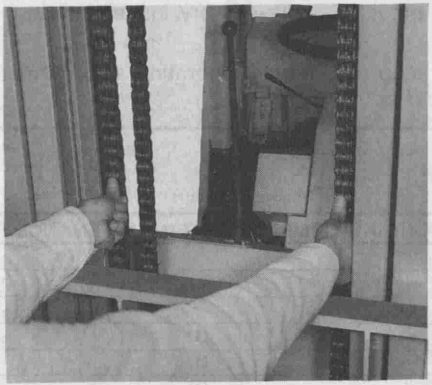
Pedal free play

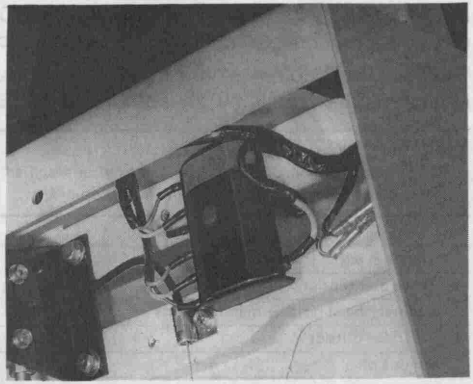
The standard free play of the pedals is as follows:

Unit: mm (in)

Model	H01 and H02
Brake pedal	5 to 8 (0.20 to 0.31)
Inching pedal (A/T model)	18.0 (0.709)
Clutch pedal (M/T model)	15.0 (0.591)







Hand brake

Make sure the hand brake works properly when pulled and then returns to its original position.

Pulling force at gripping position:

147 to 245 N

(15 to 25 kg, 33 to 55 lb)

Lift chain

Check lift chain tension periodically. Set the fork level on the ground and depress the mid-point of the lift chain with the finger.

Deflection:

25 to 35 mm (0.98 to 1.38 in)

If the deflection is not within the specifications, have the chain adjusted by a NISSAN dealer or other competent service shop.

Fuses

The fuse box is installed under the instrument panel.

Before replacing any faulty fuse, check and correct the cause of problem. Use a fuse of the specified rating which is clearly shown on the fuse cover.

PERIODIC MAINTENANCE AND LUBRICATION SCHEDULE

Before delivery of your new Forklift, your Dealer provides a pre-delivery inspection and adjustment service specified by the factory and designed to ensure satisfactory performance.

The following tables list the servicing required to keep your Forklift operating at peak mechanical condition, and should be attended to as indicated, preferably by an authorized NISSAN dealer.

MAINTENANCE OPERATION		MAINTENANCE INTERVAL											
Periodic maintenance should be performed after specified intervals have elapsed in months or hours, whichever comes first.	Months	1	2	3	4	5	6	7	8	9	10	11	12
	Hundreds of hours	2	4	6	8	10	12	14	16	18	20	22	24
ENGINE COMPARTMENT MAINTENANCE													
1. Intake & exhaust valve clearances		A		A			A			A			A
2. Drive belt tension		I	I	I	I	I	I	I	I	I	I	I	I
3. Cylinder head bolts & manifold nuts		T											
4. Radiator outside	(1)			C			C			C			C
5. Engine oil	(1)	R	R	R	R	R	R	R	R	R	R	R	R
6. Oil filter	(1)	R		R			R			R			R
7. Engine coolant (L.L.C.)													R
8. Fuel strainer element (H20)	(1)	C		C			C			C			R
Fuel strainer (A15, Z24)	(1)	I		I			I			I			R
Water separator (SD25)		D		D			D			D			R
9. Air cleaner element	(1)	C	C	C	C	C	R	C	C	C	C	C	R
10. Engine idle rpm		A	A	A	A	A	A	A	A	A	A	A	A
11. Ignition timing (Gasoline)		A	A	A	A	A	A	A	A	A	A	A	A
12. Spark plugs (Gasoline)		I	I	I	I	I	I	I	I	I	I	I	I
13. Distributor point, cap & rotor (Gasoline)		I	I	I	I	I	I	I	I	I	I	I	I
Distributor inside (IC ignition system)	(1)												C
14. P.C.V. valve (Gasoline)	(1)			I			I			I			I
15. P.C.V. hoses (Gasoline)				I			I			I			I
16. Battery specific gravity							I						I

NOTE: (1) Under dusty or other dirty operating conditions, more frequent maintenance is necessary.

Abbreviations: I = Inspect. Correct or replace if necessary.
A = Adjust
C = Clean
D = Drain
L = Lubricate
R = Replace
T = Retighten

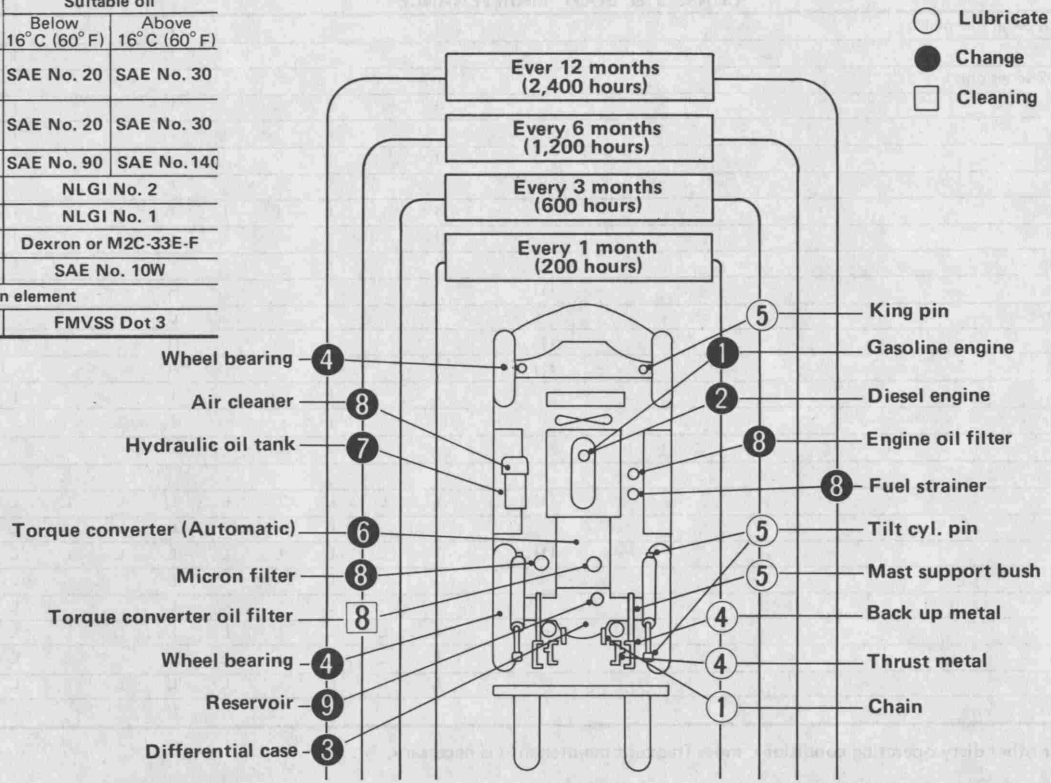
MAINTENANCE OPERATION Periodic maintenance should be performed after specified intervals have elapsed in months or hours, whichever comes first.		MAINTENANCE INTERVAL											
	Months	1	2	3	4	5	6	7	8	9	10	11	12
	Hundreds of hours	2	4	6	8	10	12	14	16	18	20	22	24
CHASSIS & BODY MAINTENANCE													
1. Brake, inching brake & clutch pedal free play		I		I			I			I			I
2. Hand brake operation		I		I			I			I			I
3. Brake booster operation (H02 series only)													I
4. Lift chain tension		I		I			I			I			I
5. Carriage rollers for damage				I			I			I			I
6. Mast operation		I		I			I			I			I
7. Mast rollers for damage							I						I
8. Lift & tilt cylinder fitting		I	I	I	I	I	I	I	I	I	I	I	I
9. Lift & tilt cylinder operation		I		I			I			I			I
10. Hydraulic oil pump operation		I		I			I			I			I
11. Torque converter oil	(1)						R						R
12. Torque converter suction filter							C						C
13. Hydraulic oil	(1)						R						R
14. Hydraulic oil filter	(1)						R						R
15. Differential oil		I		I			I			I			R
16. Transmission oil		I		I			I			I			R
17. Brake fluid													R
18. Wheel bearing grease													R
19. Lift chain	(1)	L	L	L	L	L	L	L	L	L	L	L	L
20. Clutch release bearing				L			L			L			L
21. Chain support guide bar	(1)	L	L	L	L	L	L	L	L	L	L	L	L
22. Mast support bushing				L			L			L			L
23. All links of chassis				L			L			L			L
24. Back-up metals		L	L	L	L	L	L	L	L	L	L	L	L
25. Thrust metals		L	L	L	L	L	L	L	L	L	L	L	L
26. Mast rail		L	L	L	L	L	L	L	L	L	L	L	L
27. Tilt cylinder pin				L			L			L			L

NOTE: (1) Under dusty or other dirty operating conditions, more frequent maintenance is necessary.

Abbreviations: I = Inspect. Correct or replace if necessary. L = Lubricate
C = Clean R = Replace

LUBRICATION CHART

Item	Suitable oil	
	Below 16°C (60°F)	Above 16°C (60°F)
① Gasoline engine oil	SAE No. 20	SAE No. 30
② Diesel engine oil	SAE No. 20	SAE No. 30
③ Gear oil	SAE No. 90	SAE No. 140
④ W.B. grease	NLGI No. 2	
⑤ Chassis grease	NLGI No. 1	
⑥ Tor. con. oil	Dexron or M2C-33E-F	
⑦ Hyd. oil	SAE No. 10W	
⑧ Replace or clean element		
⑨ Brake fluid	FMVSS Dot 3	

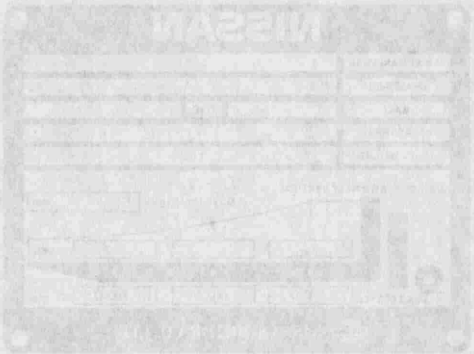


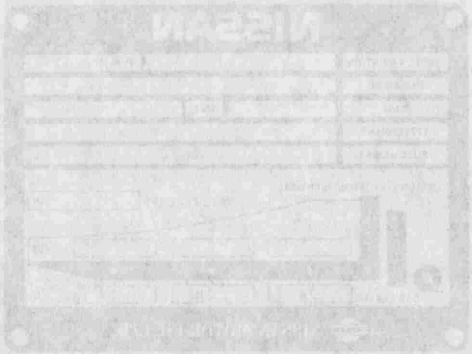
FOM290

Storage for Long Period

STORAGE FOR LONG PERIOD

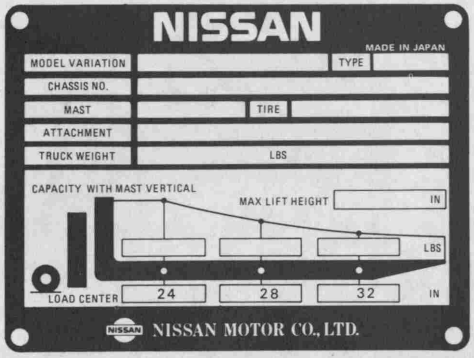
- Place truck on a level ground.
- Disconnect all cables from battery terminals to minimize self-discharging. It is better to remove and store battery in a cool and dry place.
- Keep tires inflated at normal air pressure.
- Drain cooling system thoroughly and refill system before operation. In case of being filled with long life coolant, it is not necessary to drain cooling system.





Load Chart

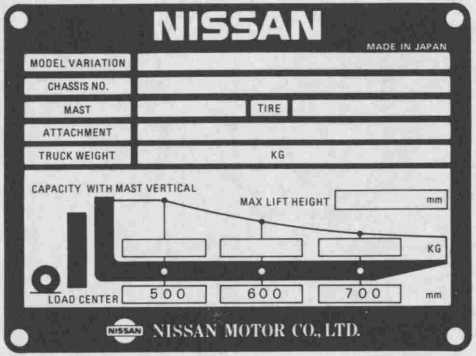
LOAD CHART



FOM291

U.S.A. and Canada

The load chart, attached to the instrument panel, indicates all necessary information regarding the type of attachments, lifting capacity, etc. If it becomes necessary to change the related description, have it modified by your Nissan dealer or Nissan Industrial Equipment Co. for U.S.A. customers or Nissan Automobile Company (Canada) Ltd., Forklift Division for Canadian customers.



FOM292

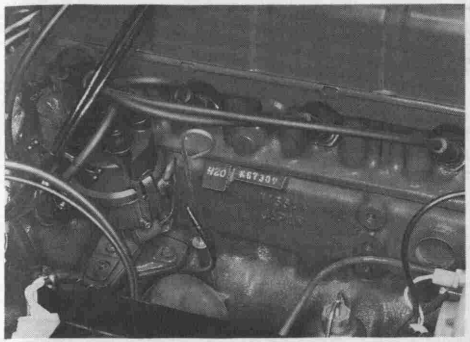
Except U.S.A. and Canada

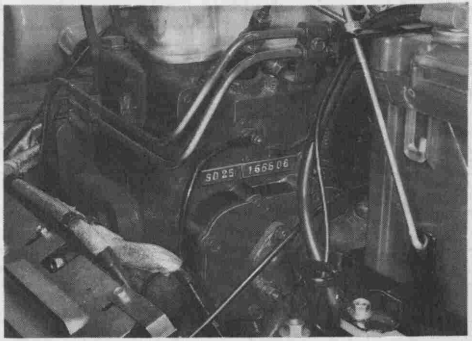
WARNING:

Do not exceed the rated capacity of the lift truck.

Identification Numbers

ENGINE SERIAL NUMBER





Gasoline engine

A15	Kxxxxx
H20	Kxxxxx
Z24	Kxxxxx

Kxxxxx — Serial number

Z24 — Engine type

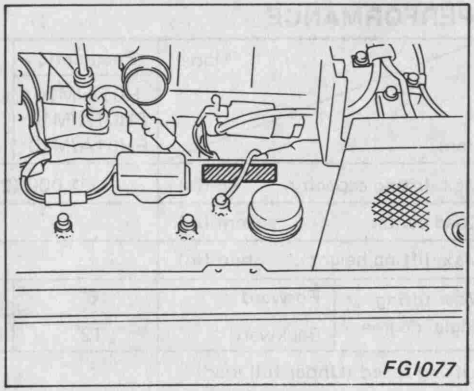
Diesel engine

SD25	xxxxxx

xxxxxx — Serial number

SD25 — Engine type

CHASSIS SERIAL NUMBER



H01	–	xxxxxx
PH01	–	xxxxxx
EH01	–	xxxxxx
CH01	–	xxxxxx
CPH01	–	xxxxxx
PH02	–	xxxxxx
EH02	–	xxxxxx
EGH02	–	xxxxxx
RGH02	–	xxxxxx
CPH02	–	xxxxxx
CEH02	–	xxxxxx
CEGH02	–	xxxxxx
CRGH02	–	xxxxxx

xxxxxx — Chassis serial number

CRGH02 — Lift truck model

Compact series

AH01	–	xxxxxx
ASH01	–	xxxxxx
APH02	–	xxxxxx
AEH02	–	xxxxxx

xxxxxx — Chassis serial number

AEH02 — Lift truck model

The number is stamped on the left side of the frame.

Specifications

H01 SERIES

PERFORMANCE

Item \ Model			Pneumatic	Cushion	Cushion	Pneumatic	Pneumatic	Cushion	Pneumatic	Cushion
			H01A/M10 PH01A/M10 EH01A/M10	CH01A10 CPH01A10	CH01A13 CPH01A13	H01A/M14 PH01A/M14 EH01A/M14	H01A/M15 PH01A/M15 EH01A/M15	CH01A15 CPH01A15	H01A/M18 PH01A/M18 EH01A/M18	CH01A18 CPH01A18
Max. lifting capacity kg (lb)			1,000 (2,000)		1,250 (2,500)	1,350 (2,700)	1,500 (3,000)		1,750 (3,500)	
Load center mm (in)			500 (24)							
Max. lifting height mm (in)			3,300 (130)							
Mast tilting angle degree		Forward	6°	5°		6°		5°	6°	5°
		Backward	12°	10°		12°		10°	12°	10°
Lifting speed (Under full load) mm (in)/sec.			500 (24)*							
Free lift mm (in)			155 (6.10)	340 (13.39)		155 (6.10)		340 (13.39)	155 (6.10)	340 (13.39)
Max. speed km/h (MPH)	A/T	Forward	A15, SD25: 18.0 (11.2) H20: 18.5 (11.5)	17.5 (10.9)		A15, SD25: 18.0 (11.2) H20: 18.5 (11.5)		17.5 (10.9)	A15, SD25: 18.0 (11.2) H20: 18.5 (11.5)	17.5 (10.9)
		Reverse	A15, SD25: 18.0 (11.2) H20: 18.5 (11.5)	17.5 (10.9)		A15, SD25: 18.0 (11.2) H20: 18.5 (11.5)		17.5 (10.9)	A15, SD25: 18.0 (11.2) H20: 18.5 (11.5)	17.5 (10.9)

*: A15 engine only 480 (18.90)

Item				Model	Pneumatic	Cushion	Cushion	Pneumatic	Pneumatic	Cushion	Pneumatic	Cushion
					H01A/M10 PH01A/M10 EH01A/M10	CH01A10 CPH01A10	CH01A13 CPH01A13	H01A/M14 PH01A/M14 EH01A/M14	H01A/M15 PH01A/M15 EH01A/M15	CH01A15 CPH01A15	H01A/M18 PH01A/M18 EH01A/M18	CH01A18 CPH01A18
Max. speed km/h (MPH)	M/T	Forward	1st		8.5 (5.3)	–		8.5 (5.3)		–	8.5 (5.3)	–
			2nd		A15, SD25: 18.0 (11.2) H20: 18.5 (11.5)	–		A15, SD25: 18.0 (11.2) H20: 18.5 (11.5)		–	A15, SD25: 18.0 (11.2) H20: 18.5 (11.5)	–
		Reverse	1st		8.5 (5.3)	–		8.5 (5.3)		–	8.5 (5.3)	–
			2nd		A15, SD25: 18.0 (11.2) H20: 18.5 (11.5)	–		A15, SD25: 18.0 (11.2) H20: 18.5 (11.5)		–	A15, SD25: 18.0 (11.2) H20: 18.5 (11.5)	–
Min. turning radius mm (in)					1,840 (72.44)	1,655 (65.16)	1,695 (66.73)	1,900 (74.80)	1,930 (75.98)	1,720 (67.72)	1,970 (77.56)	1,760 (69.29)
Tractive force (Under full load N (kg, lb)	A/T	A15			13,730 (1,400, 3,087)							
		H20			15,201 (1,550, 3,418)							
		SD25			19,124 (1,950, 4,300)	–		19,124 (1,950, 4,300)		–	19,124 (1,950, 4,300)	–
	M/T	A15			9,807 (1,000, 2,205)	–		9,807 (1,000, 2,205)		–	9,807 (1,000, 2,205)	–
		H20			13,239 (1,350, 2,977)	–		13,239 (1,350, 2,977)		–	13,239 (1,350, 2,977)	–
		SD25			15,201 (1,550, 3,418)	–		15,201 (1,550, 3,418)		–	15,201 (1,550, 3,418)	–

Item		Model	Pneumatic	Cushion	Cushion	Pneumatic	Pneumatic	Cushion	Pneumatic	Cushion
			H01A/M10 PH01A/M10 EH01A/M10	CH01A10 CPH01A10	CH01A13 CPH01A13	H01A/M14 PH01A/M14 EH01A/M14	H01A/M15 PH01A/M15 EH01A/M15	CH01A15 CPH01A15	H01A/M18 PH01A/M18 EH01A/M18	CH01A18 CPH01A18
Grade-ability (Under full load) tan θ	A/T	A15	0.34	0.36	0.31	0.28	0.26	0.27	0.23	0.24
		H20	0.45	0.45	0.38	0.37	0.35	0.33	0.31	0.29
		SD25	0.56	–	–	0.45	0.42	–	0.37	–
	M/T	A15	0.27	–	–	0.22	0.21	–	0.19	–
		H20	0.38	–	–	0.31	0.29	–	0.26	–
		SD25	0.45	–	–	0.37	0.35	–	0.31	–

DIMENSIONS

Item \ Model			Pneumatic	Cushion	Cushion	Pneumatic	Pneumatic	Cushion	Pneumatic	Cushion
			H01A/M10 PH01A/M10 EH01A/M10	CH01A10 CPH01A10	CH01A13 CPH01A13	H01A/M14 PH01A/M14 EH01A/M14	H01A/M15 PH01A/M15 EH01A/M15	CH01A15 CPH01A15	H01A/M18 PH01A/M18 EH01A/M18	CH01A18 CPH01A18
Overall length (Forkless) mm (in)		U.S.A. and Canada	2,105 (82.9)	1,925 (75.8)	1,975 (77.8)	2,170 (85.4)	2,185 (86.0)	2,010 (79.1)	2,215 (87.2)	2,050 (80.7)
		Except U.S.A. and Canada	2,100 (82.7)	1,920 (75.6)	1,970 (77.6)	2,165 (85.2)	2,180 (85.8)	2,005 (78.9)	2,215 (87.2)	2,050 (80.7)
Overall width mm (in)			1,065 (41.9)	915 (36.0)		1,065 (41.9)		915 (36.0)	1,065 (41.9)	915 (36.0)
Overall height mm (in)	Standard		2,145 (84.4)	2,105 (82.9)		2,145 (84.4)		2,105 (82.9)	2,145 (84.4)	2,105 (82.9)
	Max. lifting	U.S.A. and Canada	4,555 (179.3)							
		Except U.S.A. and Canada	4,240 (166.9)	4,555 (179.3)		4,240 (166.9)		4,555 (179.3)	4,240 (166.9)	4,555 (179.3)
Wheel base mm (in)			1,350 (53.1)	1,200 (47.2)		1,350 (53.1)		1,200 (47.2)	1,350 (53.1)	1,200 (47.2)
Tread mm (in)		Front	885 (34.8)	760 (29.9)		885 (34.8)		760 (29.9)	885 (34.8)	760 (29.9)
		Rear	900 (35.4)	800 (31.5)		900 (35.4)		800 (31.5)	900 (35.4)	800 (31.5)
Fork length mm (in)			1,070 (42.1)							
Min. ground clearance mm (in)			115 (4.5)	75 (3.0)		115 (4.5)		75 (3.0)	115 (4.5)	75 (3.0)

H02 SERIES
PERFORMANCE

Item \ Model					Pneumatic	Cushion	Pneumatic	Pneumatic	Cushion	Pneumatic	Pneumatic	Cushion	Cushion	
					PH02A/M20 EH02A/M/F20	CPH02A20 CEH02A20	PH02A/M23 EH02A/M/F23	PH02A/M25 EH02A/M/F25	CPH02A25 CEH02A25	RGH02A/M28 EGH02A/M/F28	RGH02A/M30 EGH02A/M/F30	CRGH02F30 CEGH02F30	CRGH02F33 CEGH02F33	CRGH02F35 CEGH02F35
Max. lifting capacity kg (lb)					2,000 (4,000)		2,250 (4,500)	2,500 (5,000)		2,750 (5,500)	3,000 (6,000)		3,500 (7,000)	3,500 (8,000)
Load center mm (in)					500 (24)									
Max. lifting height mm (in)					3,300 (130)								3,100 (120)	
Mast tilting angle degree	Forward				6°	5°	6°		5°	6°		5°		
	Backward				12°	10°	12°		10°	12°		10°		
Lifting speed (Under full load) mm (in)/sec.					500 (19.69)	490 (19.29)	500 (19.69)		490 (19.29)	Z24: 480 (18.90) SD25: 410 (16.14)		Z24: 480 (18.90) SD25: 490 (19.29)	Z24: 400 (15.75) SD25: 490 (19.29)	
Free lift mm (in)					155 (6.10)	330 (12.99)	155 (6.10)		330 (12.99)	160 (6.30)		315 (12.40)	320 (12.60)	
Max. speed km/h (MPH)	A/T	1-speed A/T	Forward		H20: 19.0 (11.8) SD25: 18.5 (11.5)	H20: 17.0 (10.6) SD25: 16.5 (10.3)	H20: 19.0 (11.8) SD25. 18.5 (11.5)		H20: 17.0 (10.6) SD25: 16.5 (10.3)	Z24: 18.5 (11.5) SD25: 18.0 (11.2)		–	–	
			Reverse		H20: 19.0 (11.8) SD25: 18.5 (11.5)	H20: 17.0 (10.6) SD25: 16.5 (10.3)	H20: 19.0 (11.8) SD25: 18.5 (11.5)		H20: 17.0 (10.6) SD25: 16.5 (10.3)	Z24: 18.5 (11.5) SD25: 18.0 (11.2)		–	–	
		2-speed A/T	For-ward	1st	12.5 (7.8)	–	12.5 (7.8)		–	13.0 (8.1)		10.0 (6.2)		
				2nd	21.5 (13.4)	–	21.5 (13.4)		–	22.5 (14.0)		17.5 (10.9)		
			Re-verse	1st	21.5 (13.4)	–	21.5 (13.4)		–	22.5 (14.0)		17.5 (10.9)		

Item			Model	Pneumatic	Cushion	Pneumatic	Pneumatic	Cushion	Pneumatic	Pneumatic	Cushion	Cushion	
				PH02A/M20 EH02A/M/F20	CPH02A20 CEH02A20	PH02A/M23 EH02A/M/F23	PH02A/M25 EH02A/M/F25	CPH02A25 CEH02A25	RGH02A/M28 EGH02A/M/F2	RGH02A/M30 EGH02A/M/F3	CRGH02F30 CEGH02F30	CRGH02F33 CEGH02F33	CRGH02F35 CEGH02F35
Max. speed km/h (MPH)	M/T	Forward	1st	9.0 (5.6)	–	9.0 (5.6)		–	Z24: 8.5 (5.3) SD25: 9.0 (5.6)		–	–	
			2nd	H20: 19.0 (11.8) SD25: 18.5 (11.5)	–	H20: 19.0 (11.8) SD25: 18.5 (11.5)		–	Z24: 18.5 (11.5) SD25: 18.0 (11.2)		–	–	
		Reverse	1st	9.0 (5.6)	–	9.0 (5.6)		–	Z24: 8.5 (5.3) SD25: 9.0 (5.6)		–	–	
			2nd	H20: 19.0 (11.8) SD25: 18.5 (11.5)	–	H20: 19.0 (11.8) SD25: 18.5 (11.5)		–	Z24: 18.5 (11.5) SD25: 18.0 (11.2)		–	–	
Min. turning radius			mm (in)	2,150 (84.65)	1,935 (76.18)	2,185 (86.02)	2,220 (87.40)	1,995 (78.54)	2,370 (93.31)	2,420 (95.28)	2,075 (81.69)	2,125 (83.66)	2,185 (86.02)
Tractive force (Under full load N (kg, lb)	A/T	H20		15,201 (1,550, 3,418)	16,182 (1,650, 3,638)	15,201 (1,550, 3,418)		16,182 (1,650, 3,638)	–		–		
		SD25	1-speed A/T	17,162 (1,750, 3,859)	19,124 (1,950, 4,300)	17,162 (1,750, 3,859)		19,124 (1,950, 4,300)	18,633 (1,900, 4,190)		–		
			2-speed A/T	27,460 (2,800, 6,174)	–	27,460 (2,800, 6,174)		–	24,518 (2,500, 5,513)		29,911 (3,050, 6,725)		
		Z24		–	–	–		–	19,614 (2,000, 4,410)		30,892 (3,150, 6,946)		
	M/T	H20		13,730 (1,400, 3,087)	–	13,730 (1,400, 3,087)		–	–		–		
		SD25		15,201 (1,550, 3,418)	–	15,201 (1,550, 3,418)		–	14,711 (1,500, 3,308)		–		
		Z24		–	–	–		–	15,691 (1,600, 3,528)		–		

Item		Model		Pneumatic	Cushion	Pneumatic	Pneumatic	Cushion	Pneumatic	Pneumatic	Cushion	Cushion	
				PH02A/M20 EH02A/M/F20	CPH02A20 CEH02A20	PH02A/M23 EH02A/M/F23	PH02A/M25 EH02A/M/F25	CPH02A25 CEH02A25	RGH02A/M28 EGH02A/M/F2	RGH02A/M30 EGH02A/M/F3	CRGH02F30 CEGH02F30	CRGH02F33 CEGH02F33	CRGH02F35 CEGH02F35
Grade-ability (Under full load tan θ	A/T	H20		0.25	0.27	0.24	0.22	0.23	–	–	–	–	–
		SD25	1-speed A/T	0.31	0.33	0.28	0.27	0.28	0.24	0.22	–	–	–
			2-speed A/T	0.51	–	0.47	0.43	–	0.34	0.32	0.38	0.33	0.32
		Z24		–	–	–	–	–	0.26	0.25	0.43	0.37	0.35
	M/T	H20		0.21	–	0.20	0.19	–	–	–	–	–	–
		SD25		0.25	–	0.24	0.22	–	0.20	0.19	–	–	–
		Z24		–	–	–	–	–	0.22	0.21	–	–	–

DIMENSIONS

Item \ Model			Pneumatic	Cushion	Pneumatic	Pneumatic	Cushion	Pneumatic	Pneumatic	Cushion	Cushion	
			PH02A/M20 EH02A/M/F20	CPH02A20 CEH02A20	PH02A/M23 EH02A/M/F23	PH02A/M25 EH02A/M/F25	CPH02A25 CEH02A25	RGH02A/M28 EGH02A/M/F28	RGH02A/M30 EGH02A/M/F30	CRGH02F30 CEGH02F30	CRGH02F33 CEGH02F33	CRGH02F35 CEGH02F35
Overall length (Forkless) mm (in)			2,465 (97.0)	2,190 (86.2)	2,505 (98.6)	2,530 (99.6)	2,255 (88.8)	2,705 (106.5)	2,740 (107.9)	2,380 (93.7)	2,460 (96.9)	2,505 (98.6)
Overall width mm (in)			1,150 (45.3)	1,035 (40.7)	1,150 (45.3)		1,035 (40.7)	1,230 (48.4)		1,100 (43.3)	1,145 (45.1)	
Overall height mm (in)	Standard		2,145 (84.4)	2,110 (83.1)	2,145 (84.4)		2,110 (83.1)	2,165 (85.2)		2,110 (83.1)		
	Max. lifting	U.S.A. and Canada	4,555 (179.3)					4,650 (183.1)		4,445 (175.0)	4,540 (178.7)	
		Except U.S.A. and Canada	4,340 (170.9)	4,555 (179.3)	4,340 (170.9)		4,555 (179.3)	4,435 (174.6)		4,445 (175.0)	4,540 (178.7)	
Wheelbase mm (in)			1,610 (63.4)	1,350 (53.1)	1,610 (63.4)		1,350 (53.1)	1,760 (69.3)		1,500 (59.1)		
Tread mm (in)	Front		960 (37.8)	855 (33.7)	960 (37.8)		855 (33.7)	1,000 (39.4)		895 (35.2)	915 (36.0)	
	Rear		965 (38.0)	885 (34.8)	965 (38.0)		855 (34.8)	970 (38.2)		930 (36.6)	930 (36.6)	
Fork length mm (in)			1,070 (42.1)									
Min. ground clearance mm (in)			115 (4.5)	80 (3.1)	115 (4.5)		80 (3.1)	130 (5.1)		80 (3.1)		

COMPACT SERIES PERFORMANCE

Item \ Model				ASH01 A/M10	ASH01 A/M13	AH01 A/M15	AH01 A/M18	APH02 A/M20 AEH02 A/M20	APH02 A/M23 AEH02 A/M23	APH02 A/M25 AEH02 A/M25
Max. lifting capacity			kg (lb)	1,000 (2,000)	1,250 (2,500)	1,500 (3,000)	1,750 (3,500)	2,000 (4,000)	2,250 (4,500)	2,500 (5,000)
Load center			mm (in)	500 (24)						
Max. lifting height			mm (in)	3,300 (130)						
Mast tilting angle degree		Forward		5°						
		Backward		10°						
Lifting speed (Under full load)			mm (in)/sec.	520 (20.5)		510 (20.1)		500 (19.7)		
Free lift			mm (in)	285 (11.2)		280 (11.0)		270 (10.6)		
Max. speed km/h (MPH)	A/T	Forward		17.0 (10.6)		16.5 (10.3)		17.0 (10.6)*1, 16.5 (10.3)*2		
		Reverse		17.0 (10.6)		16.5 (10.3)		17.0 (10.6)*1, 16.5 (10.3)*2		
	M/T	Forward	1st	8.0 (5.0)		7.5 (4.7)		8.0 (5.0)*1, 7.5 (4.7)*2		
			2nd	17.0 (10.6)		16.5 (10.3)		17.0 (10.6)*1, 16.5 (10.3)*2		
		Reverse	1st	8.0 (5.0)		7.5 (4.7)		8.0 (5.0)*1, 7.5 (4.7)*2		
			2nd	17.0 (10.6)		16.5 (10.3)		17.0 (10.6)*1, 16.5 (10.3)*2		
Min. turning radius			mm (in)	1,700 (66.9)	1,740 (68.5)	1,830 (72.0)	1,890 (74.4)	2,000 (78.7)	2,030 (79.9)	2,060 (81.1)
Tractive force (Under full load)			A/T	14,220 (1,450, 3,197)		14,711 (1,500, 3,308)		17,162 (1,750, 3,859)*1, 20,595 (2,100, 4,631)*2		
		N (kg, lb)	M/T	9,807 (1,000, 2,205)		10,297 (1,050, 2,315)		13,730 (1,400, 3,087)*1, 16,182 (1,650, 3,638)*2		
Gradeability (Under full load)		tan θ	A/T	41	35	31	27	31*1, 37*2	28*1, 34*2	26*1, 32*2
			M/T	33	28	25	22	26*1, 31*2	24*1, 28*2	22*1, 26*2

*1: For gasoline model
*2: For diesel model

DIMENSIONS

Item \ Model		ASH01 A/M10	ASH01 A/M13	AH01 A/M15	AH01 A/M18	APH02 A/M20 AEH02 A/M20	APH02 A/M23 AEH02 A/M23	APH02 A/M25 AEH02 A/M25
Overall length (Forkless) mm (in)		1,930 (76.0)	1,970 (77.6)	2,095 (82.5)	2,135 (84.1)	2,240 (88.2)	2,270 (89.4)	2,305 (90.7)
Overall width mm (in)		955 (37.6)	1,020 (40.2)	1,030 (40.6)	1,125 (44.3)		1,175 (46.3)	
Overall height mm (in)	Standard	2,105 (82.9)		2,140 (84.3)			2,105 (82.9)	
	Max. lifting	4,245 (167.1)						
Wheelbase mm (in)		1,200 (47.2)		1,350 (53.1)			1,500 (59.1)	
Tread mm (in)	Front	820 (32.3)	845 (33.3)	870 (34.3)	920 (36.2)		975 (38.4)	
	Rear	800 (31.5)		885 (34.8)			930 (36.6)	
Fork length mm (in)		1,070 (42.1)						
Min. ground clearance mm (in)		75 (3.0)		105 (4.1)			75 (3.0)	

TIRE SIZE

Item	Type		Pneumatic	Cushion
H01 series	Front		6.50-10-10PR (I)	18 x 6 x 12-1/8
	Rear		5.00-8-8PR (I)	14 x 4-1/2 x 8
H02 series	Front	2.0 - 2.5 ton (4,000 - 5,000 lb)	7.00-12-12PR (I)	21 x 7 x 15
		2.75 - 3.0 ton (5,500 - 6,000 lb)	28 x 9-15-12PR (I)	22 x 8 x 16
		3.5 ton (7,000 - 8,000 lb)	—	22 x 9 x 16
	Rear	2.0 - 2.5 ton (4,000 - 5,000 lb)	6.00-9-10PR (I)	16-1/4 x 6 x 11-1/4
		2.75 - 3.0 ton (5,500 - 6,000 lb)	6.50-10-10PR (I)	18 x 5 x 12-1/8
		3.5 ton (7,000 - 8,000 lb)	—	18 x 6 x 12-1/8

TIRE SIZE
Compact series

Front	ASH01	1.0 ton	5.00-8-8PR(I)
		1.25 ton	18 x 7-8-10PR(I)
	AH01	1.5 ton	6.00-9-10PR(I)
		1.75 ton	21 x 8-9-10PR(I)
	APH02/ AEH02	2.0 ton	21 x 8-9-14PR(I)
		2.25 ton	
		2.5 ton	
Rear	ASH01	1.0 ton	15 x 4-1/2-8-8PR(I)
		1.25 ton	
	AH01	1.5 ton	5.00-8-8PR(I)
		1.75 ton	
	APH02/ AEH02	2.0 ton	18 x 7-8-10PR(I)
		2.25 ton	
		2.5 ton	

ENGINE

Item \ Model	A15	H20	SD25	Z24
Type	Gasoline		Diesel	Gasoline
Cylinder arrangement	4-cylinder, in-line			
Valve mechanism	Overhead valve type			
Bore x Stroke mm (in)	76.0 x 82.0 (2.992 x 3.228)	87.2 x 83.0 (3.433 x 3.268)	89.0 x 100.0 (3.504 x 3.937)	89.0 x 96.0 (3.504 x 3.780)
Total displacement cm^3 (cu in)	1,487 (90.74)	1,982 (120.94)	2,488 (151.82)	2,388 (145.72)
Compression ratio	9.0	9.1	21.1	8.3
Firing order	1 - 3 - 4 - 2			

OIL & WATER CAPACITY

Item \ Model	A15			H20			SD25			Z24		
	ℓ	US qt	Imp qt	ℓ	US qt	Imp qt	ℓ	US qt	Imp qt	ℓ	US qt	Imp qt
Engine (with oil filter)	3.8	4	3-3/8	4.2	4-1/2	3-3/4	6.5	6-7/8	5-3/4	3.7	3-7/8	3-1/4
Engine cooling water	6.3	6-5/8	5-1/2	8.5	9	7-1/2	9.6	10-1/8	8-1/2	7.8	8-1/4	6-7/8

FUEL & OIL CAPACITY

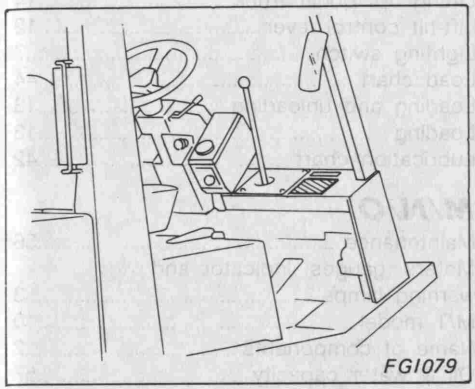
Item \ Model				H01 series			H02 series					
							2.0 - 2.75 ton (4,000 - 5,500 lb)			3.0 - 3.5 ton (6,000 - 8,000 lb)		
				ℓ	US	Imp	ℓ	US	Imp	ℓ	US	Imp
Fuel tank	Pneumatic-tire model			46	12-1/8 gal	10-1/8 gal	57	15-1/8 gal	12-1/2 gal	57	15-1/8 gal	12-1/2 gal
	Cushion-tire model			28	7-3/8 gal	6-1/8 gal	46	12-1/8 gal	10-1/8 gal	60	15-7/8 gal	13-1/4 gal
	Compact series			47 28.5*3	12-3/8 gal 7-1/2 gal*3	10-3/8 gal 6-1/4 gal*3	47	12-3/8 gal	10-3/8 gal	—	—	—
Hydraulic oil tank	Pneumatic-tire model			40	10-5/8 gal	8-3/4 gal	50	13-1/4 gal	11 gal	56	14-3/4 gal	12-3/8 gal
	Cushion-tire model			30	7-7/8 gal	6-5/8 gal	43	11-3/8 gal	9-1/2 gal	60	15-7/8 gal	13-1/4 gal
	Compact series			43 30*3	11-3/8 gal 7-7/8 gal*3	9-1/2 gal 6-5/8 gal*3	60	15-7/8 gal	13-1/4 gal	—	—	—
Trans-mission oil	Pneumatic-tire model	A/T	1-speed A/T	8.0	8-1/2 qt	7 qt	8.0	8-1/2 qt	7 qt	8.0	8-1/2 qt	7 qt
			2-speed A/T	—	—	—	10.5	11-1/8 qt	9-1/4 qt	10.5	11-1/8 qt	9-1/4 qt
		M/T	3-shaft	5.1	5-3/8 qt	4-1/2 qt	9.5*1	10 qt*1	8-3/8 qt*1	9.5*1	10 qt*1	8-3/8 qt*1
			4-shaft				9*2	9-1/2 qt*2	7-7/8 qt*2	9*2	9-1/2 qt*2	7-7/8 qt*2
	Cushion-tire model	A/T		8.0	8-1/2 qt	7 qt	8.0	8-1/2 qt	7 qt	10.5	11-1/8 qt	9-1/4 qt
Differential oil	Pneumatic-tire model			2.7	2-7/8 qt	2-3/8 qt	3.0	3-1/8 qt	2-5/8 qt	3.0	3-1/8 qt	2-5/8 qt
	Cushion-tire model			2.7	2-7/8 qt	2-3/8 qt	2.7	2-7/8 qt	2-3/8 qt	3.0	3-1/8 qt	2-5/8 qt

*1: Including differential oil *2: Excluding differential oil *3: For short wheelbase model

BULBS

Item		Wattage (W)
Headlamp		27
Rear combination light	Stop/Tail	25/8
	Turn signal	27
	Back-up	10
Front turn signal lamp		27
Back operation lamp		27

WEIGHT



Refer to the "ROAD CHART LABEL" attached to the instrument panel.

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NISSAN

NISSAN MONTACARGAS

MANUAL DEL OPERADOR

SERIES DE LOS MODELOS H01, H02

H012-E

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