

# MAINTENANCE

MAINTENANCE REQUIREMENTS	MA- 2
MAINTENANCE SCHEDULE	
SEVERE DRIVING	MA- 5
MAINTENANCE OPERATION	MA- 6
AIR CLEANER ELEMENT	MA- 6
VALVE CLEARANCES	MA- 6
ENGINE OIL & OIL FILTER	MA- 6
FUEL FILTER	
FUEL LINE & CONNECTIONS	MA- 8
ENGINE COOLANT	MA- 8
DRIVE BELTS	MA- 9
TIMING BELT	MA-10
SPARK PLUGS BLOW-BY GAS	MA-10
RECIRCULATION HOSE	MA-10
CHARCOAL CANISTER	
HOSES	MA-11
& MUFFLER MOUNTING	MA-11
CLUTCH	
OIL COOLER HOSES	MA-12

AUTOMATIC TRANSMISSION	
FLUID	. MA-12
MANUAL TRANSMISSION OIL	. MA-13
DRIVE SHAFT BOOT	. MA-13
STEERING LINKAGE	
STEERING GEAR BOX	
POWER STEERING PUMP	
FLUID HOSE	. MA-14
SHOCK ABSORBERS	
SUSPENSIONS	
WHEEL BEARINGS	
WHEEL ALIGNMENT	
BRAKE PEDAL	
PARKING BRAKE	
FRONT BRAKE DISC	
& DISC PAD	. MA-16
BRAKE HOSES & TUBES	
P & B VALVE	
BRAKE FLUID	
BRAKE DRUMS & LININGS	
BRAKE BOOSTER	W. W
VACUUM HOSES	MA-17
MASTER CYLINDER	
WHEEL CYLINDERS	
WHEEL HUB NUTS	
	MADDOD1-00000

## MAINTENANCE REQUIREMENTS

The scheduled maintenance service is important to ensure trouble-free, safe and economical driving. Failure to perform the scheduled maintenance may cause an accident or serious damage.

If you conduct the periodical maintenance, Daihatsu car owners may reduce the chance of accidents or car problems. Furthermore, it becomes possible for you to find at an earlier stage malfunctions which may lead to serious damages. Consequently, potential vehicle damage can be prevented or the degree of the damage can be minimized.

Therefore, all of the persons who are concerned with servicing the Daihatsu vehicles should offer the periodical maintenance service to Daihatsu car owners in order that they may be protected from accidents or unexpected problems.

To prevent malfunctions in advance, however, conducting the periodical maintenance service only is insufficient. It is essential that owners themselves perform maintenance, such as the pre-starting check described in the owner's manual, so that the vehicle exhibits no abnormal change or phenomenon. Hence, please explain to owners about the necessity of maintenance performed by them. However, maifunction may occur on those vehicles which are always checked by their owners. For instance, if a part instructed to be replaced periodically should be used beyond the replacement intervals and the life of the part has expired, there are cases where maifunction occurs suddenly despite the fact that no malfunction has taken place until yesterday. To prevent such malfunction in advance, be sure to replace parts recommended to be replaced periodically at the specified replacement intervals.

This section describes those items of the scheduled maintenance service recommended by the Daihatsu and their intervals. Be sure to observe the maintenance schedule.

LN/A00002-00000

## MAINTENANCE SCHEDULE

## NOTE:

Perform the periodical maintenance at the specified mileage or the time whichever comes first, unless otherwise specified.

Continue to perform the periodical maintenance after 100,000 km (60,000 miles) at the same inter-

vals as before 100,000 km.

- If the vehicle should be operated under severe driving conditions, operated occasionally, operated in dusty areas, repeating short trips, operated under extremely cold climate and/or on salted roads, it is necessary to perform some maintenance items more frequently than the regular maintenance schedule.
- This maintenance schedule was prepared based on requirements mentioned in the owner's manual
  which are to be performed by the Daihatsu owner thoroughly.

				×1000 km	1	10	20	30	43	50	60	70	80	90	100	
Section	Item	What to do	Inspection interval	×1000 miles	0.6	6	12	18	24	30	36	42	48	54	60	See
				Years	-	0.5	1	1.5	2	25	3	3.5	4	4.5	5	
	Air cleaner element	Cleaning Check • Damage				FILS C	0				0		0		0	MA-6
	Valve disarance	Спеск & абјизлин	ent			-			0				0			MA-6
	Engine oil & oil filter	Change (Use API:	SG or higher grade)			0	1	E	vary	12.0	00 k	m				MA-6
	Fuel filter	Change		J J DE		40		B	ery	100,	000	m				MA-7
	Fuel line & connections (including fuel hoses)	Check Crack Tightness Leakage Demage						E C	very	40,0	00 k	m		-		8-AM
Engine	Coolant (Long-life coolant)	Change						- 1	bery	two	year	3	_			MA-8
	Drive belt (Atemator, water pump, power steering)	Check Tension Crack Damage					0		0		0		0		0	MA-9
	Timing belt	Change						E	rery	100.	000	km				MA-10
	Spark plug	Cleaning & check Condition Gap Demage	3 11				0		0		0		0		0	MA-10
	Blow-by gas recirculation hose (Positive crankcase ventilation hose)	Check • Connection • Damage	1 5 31 1	The l			1		0				0			MA-10
Exhaust emission control	Charcoal canister	Check • Function • Damage							0				0			MA-10
system	Evaporative emission hoses	Change		111				E	valy	eg/	t yes	25				MA-1
	Exhaust pipe & muttler mounting	Check - Tightness - Demane	1 7 7 1				0		0		0		0		0	MA-11

\* Replace every 10,000 km when API SF grade oil is used.

LWA00003-00000

O-Check or inspect. 
- Change or replace.

	1	104 200		×1000 km	1	10	20	30	40	50	60	70	80	90	100	
Section	Item	What to do	Inspection interval	×1000 miles	0.6	8	12	18	24	30	36	42	48	54	60	See
9, 39	grade regions of	and the street		Years	-	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	but
edy is	Clutch	Check  Free travel  Reserve travel  Darrage	r sta Korel		-		0		0		0		0		0	MA-13
Power	Manual transmission	Change • Oil	calles earn by	-		rigi							•			MA~13
frain system	Automatic transmission	Change • Fluid						8	very	80,0	00 k	п		H		MA-12
	Automatic transmission Dil cooler hose	Chack • Crack, scratch, cut	L twist and swelling		10		ò	8	very	40,0	00 k	m	19	4.5		MA-12
	Drive shaft bool	Check • Damage					0		0		0		0		0	MA-13
Suspen-	Shock absorber	Check • Function • Oil teakage (Shock • Damage	absorber)				0		0		0		0		0	MA-14
sion system	Suspension	Check  Tightness Damage Rattle		71.17	6 El . S				0				0			MA-14
Running system	Wheel bearing	Check Tightness Damage Ratio			10 10				0	100		100	0			MA-14
Steening	Steering linkage, gear box	Check • Free play (Steering • Tightness • Rattle • Damage	y wheel)				0		0		0		0		0	MA-13
system	Wheel alignment	Check + Toe-in							0				0			MA-15
	Fluid hose	Check • Crack, scratch, cut	twist and swelling					I.	Ever	у 4 у	8819			Ī		MA-14

UMA00004-00000

							C	) Of	eck)	or in	1Sper	of t		Chan	ge o	replace
1007				×1000 km	1	10	20	30	40	50	60	70	80	90	100	221
Section	Item	What to do	Inspection interval	×1000 miles	0.5	6	12	18	24	30	36	42	45	54	80	See page
	57 at 250			Years	-	0.5	1	1.5	2	25	3	3.5	4	4.5	5	155
	Brake pedal & Parking brake	Check Free play (Bra Reserve trave) Working trave	(Brake pedal)			21.5	0	171	0		0		0		0	MA-15
	Disc & Disc pad	Check • Wear • Damage	Military Appellated in	t of the	7		0		0		0	100	0		0	MA-16
Brake system	Brake hose, tube and P & B valve	Check  Leakage (Fluid  Loose clamp  Damage	(level, connection)				0	10	0		0		0	3	0	MA-16
	Brake fluid	Charge				J.		WO 4	Eve	y2)	ears					MA-16
SAFE	Braxe drum & lining	Check  • Wear  • Damage	/ellipies li	Tyles (		gri	0		0		0		0	10	0	MA-17
	Brake booster vacuum hose	Check							Eve	y 4	years					MA-17
	Master & wheel cylinder	Check • Leakage	Linear De No	100 tid 20					Eve	ry 2 y	year					MA-17
Chassis & body	Wheel hub out, other bolts & nuts	Check • Tighthese					0	iR.	0		0		0		0	MA-18

## SCHEDULE FOR SEVERE DRIVING

Carlo Balling	Charles .	and the same of th	THE RESERVE ASSETS
CH-Check o	r inspect · @	- Unange	dr reprace.

									43.5	100	MES.				200	
100	PHILIPPINE STATE	1800	Will reduce	×1000 km	1	10	20	30	40	50	60	70	80	90	100	
Section.	Item	What to do	Inspection interval	×1000 miles	0.6	6	12	18	24	30	36	12	48	54	60	See
				Years	-	0.5	1	1.5	2	2.5	3	35	A	4.5	5	1.00
CH 10	Engine on & all filter	Change			lu:			1	EVEN	5,0	00 k	m				МА-6
Engine	Air cleaner element	Check & cleaning  • Damage Change				C	heok eplas	and sme	cles int: E	ning	Evi 20,0	hry 5.	000 m	km	1	MA-6
Exhaust emission control system	Exhaust pipe and incurring	Check Tightness Damage	section may;			0	0	0	0	0	0	0	0	0	0	MA-11
Power	Manual transmission	Change • Oil	10 to 10 to 1		1			E	very	25,0	000	OTT	3			MA-13
train system	Automatic transmission	Change • Fluid	market fillers	E CONT	100	19/1 13 c		E	very	50.0	000	vm				MA-12
Steering system	Steering tinkage	Check Tightness Damage	no literary o	et yeten		0	0	0	0	0	0	0	0	0	0	MA-13
Brake	Disc & disc pad	Check  Wear  Damage	er per spec	-		0	0	0	0	0	0	0	0	0	0	MA-16
system	Brake drum & lining	Check  Wear  Damage				0	0	0	0	0	0	0	0	0	0	MA-17

JMA00008-00000

## MAINTENANCE OPERATION

## AIR CLEANER ELEMENT

- Perform checking every two years or 40,000 kilometer running, whichever comes first.
- If the vehicle has been run under severe driving environments, perform cleaning every 5,000 kilometer running. Also, replace the air cleaner element every 20,000 kilometer running.
- Take out the air cleaner element from the air cleaner case.
   Check the element for oil contamination or restriction.
- When cleaning, blow compressed air first from the downstream side of the air cleaner element. Then, blow compressed air from the upstream side so that dust or other contamination may be removed.

## WARNING:

Be sure to wear safety goggles during this operation.

#### CAUTION:

 The pressure of the compressed air should not exceed 392 kPa.

## VALVE CLEARANCES

 Perform checking every two years or 40,000 kilometer running, whichever comes first.

#### NOTE:

For the adjustment procedure, refer to Section EM.
 Specified Values:

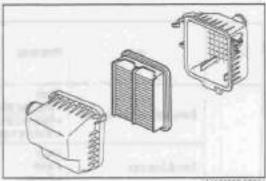
Intake: 0.18 ± 0.05 mm Exhaust: 0.25 ± 0.05 mm (During engine cold period)

## ENGINE OIL & OIL FILTER

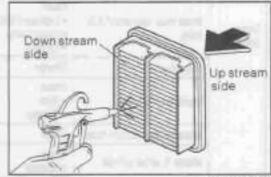
- Change engine oil and replace the oil filter every 12,000 kilometer running.
- If the vehicle has been run under severe driving environments, change engine oil and replace the oil filter every 5,000 kilometer running.
- Park the vehicle at a level place. Place a suitable container under the engine oil drain plug and oil filter.

#### WARNING:

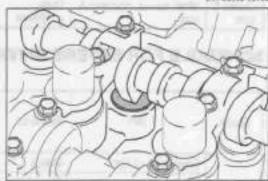
- There is the possibility that you may burn yourself during this operation when the engine is hot.
- Remove the oil filer cap so that the engine oil may be drained easily. Then, remove the drain plug and drain the engine oil.
- 5. Remove the oil filter.



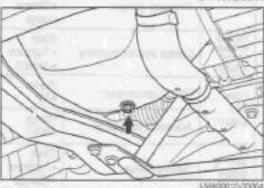
LWAC0007-00001



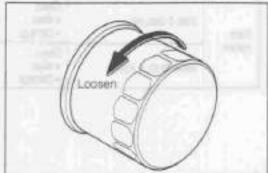
.WA00008-00000



LMA00009-0000



LNIAGEG (D-COO



1000001 L 20000

- 6. Wipe off thoroughly residual oil at the oil filter installation section with a cloth or the like
- 7. Apply a thin film of engine oil to the O-ring section of the oil filter.
- 8. Install the oil filter by turning it by your hand, until the Oring of the oil filter may fit closely to the bracket.
- 9. Tighten the oil filter again by turning it another one-fourth turn with the following SST.

SST: 09228-87201-000

- Install the new gasket and drain plug to the engine oil pan. Tightening Torque: 8.0 ± 1.6 N·m
- Fill the engine oil.

#### CAUTION:

- The API grade oil of SG or higher should be used. (The amount of oil to be filled is about 3.0 liters.)
- 12. Check the amount of oil that has been filled by means of the oil level gauge. Ensure that the oil level is between the L and F marks of the gauge.
  - With a cloth or the like, wipe the forward end of the oil level gauge that will be dipped into the oil. Confirm the oil level by measuring the oil level two or three times.
- Close the oil filler cap.

## **FUEL FILTER**

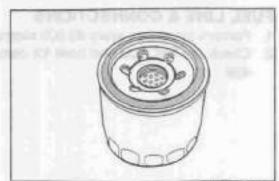
#### NOTE:

NOTE:

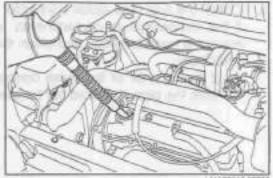
- Since the fuel filter is integral with the fuel pump inside the gasoline tank, the fuel pump should be replaced.
- Replace the fuel filter every 100,000 kilometer running.
- 2. Lower the gasoline tank from the vehicle.
- 3. Remove the fuel pump.
- 4. Install the new fuel pump and gasket. Tightening Torque: 0.6 - 0.9 N-m
- Install the gasoline tank to the vehicle. Connect the pipes;

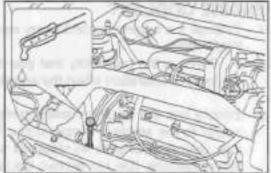
#### NOTE:

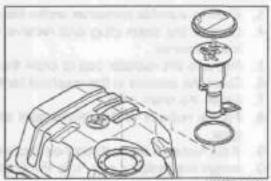
 As for the removal and installation procedures, refer to the section BO.

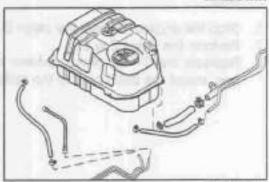


K0000-8-000M





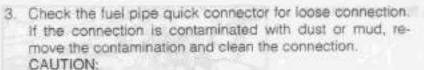




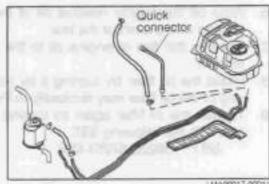
LMA00016-00010

## **FUEL LINE & CONNECTIONS**

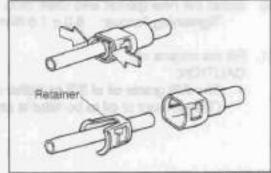
- Perform the check every 40,000 kilometer running.
- Check the fuel pipe and hose for damage, cracks or leakage.



 If the retainer of the guick connector is once removed from the pipe, it should not be used again.



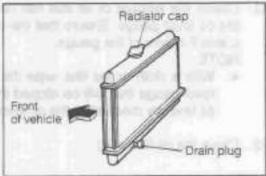
LMA00017-0001



LWAG001E-00012

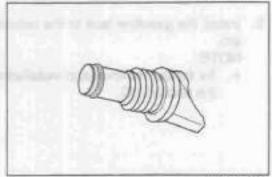
## ENGINE COOLANT

- Change the engine coolant every two years. WARNING:
  - There is the possibility that you may burn yourself during this operation when the engine is hot.
- 2. Ensure that the engine coolant temperature has dropped nearly to the ambient temperature. Then, turn the radiator cap counterclockwise 45 degrees to release the radiator inner pressure. (Do not remove the cap at this time.)
- Place a suitable container under the radiator drain plug.
- 4. Loosen the drain plug and receive the engine coolant in the container.
- Remove the radiator cap to drain the coolant completely.
- Drain the coolant in the reservoir tank into the container.
- Close the drain plug.
- 8. Fill the radiator and reservoir tank with water. Start the engine.
- If the water in the radiator has dropped, replenish water.
- Install the radiator cap. Idle the engine for about five minutes
- Stop the engine. Repeat the steps 2 to 10 three times.
- 12. Perform the steps 2 to 6.
- 13. Replace the O-ring of the radiator drain plug with a new one. Install the drain plug to the radiator.



LMAS0019-00013





LMA00021-00015

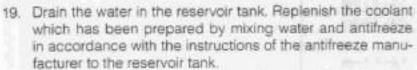
14. Fill the coolant to the radiator in the amount specified by the antifreeze manufacturer.

Coolant capacity:

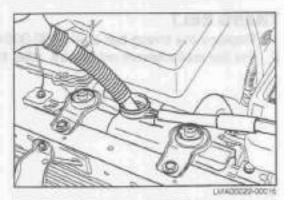
Automatic transmission: 2.9 liters Manual transmission: 3.0 liters Reservoir tank: 0.45 liter

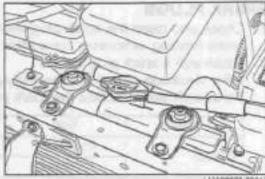


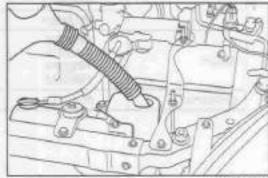
- Close the radiator cap. Warm up the engine.
- 17. Check the pipe connections and other sections for water leakage.
- 18. Stop the engine. Ensure that the engine coolant temperature has dropped nearly to the ambient temperature. Then, turn the radiator cap counterclockwise 45 degrees to release the radiator inner pressure completely. Open the radiator cap and check to see if the coolant level has dropped. Replenish the coolant, as required.



20. Securely close the radiator cap and reservoir tank lid.



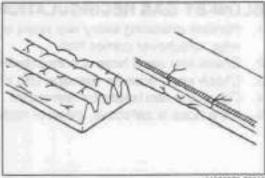






## DRIVE BELTS

- Check the drive belt every year or 20,000 kilometer running, whichever comes first.
- 2. Check the rubber for deterioration, cracks or exposure of the core. Also check the drive belt for damage.
- If the drive belt exhibits defects, replace it.
- 4. Check the drive belt for tension.



#### NOTE:

After installing a new drive belt, run the engine for at least about five minutes. Then, check the belt deflection.

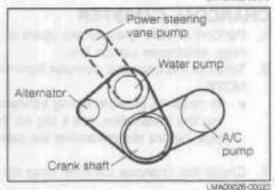
Specified Value:

Between alternator and crankshaft pulley:

Between power steering pump and water pump:

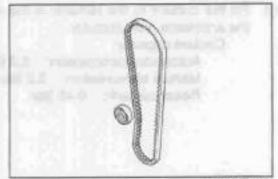
7.5 - 11.5 mm

(When a force of 98 N is applied at midpoint of pulleys:)

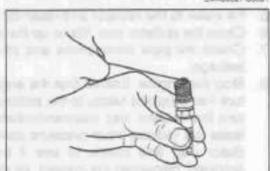


## TIMING BELT

- 1. Replace the timing belt every 100,000 kilometer running.
- 2. For the replacement procedure, refer to Section EM,



LWA00027-00021



LMA00028-00022

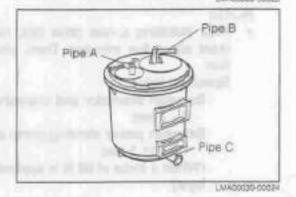
## SPARK PLUGS

- Check and clean the spark plug every year or 20,000 kilometer running, whichever comes first.
- Clean with a spark plug cleaner.
- If the electrode gap of the spark plug does not conform to the specification, replace the spark plug.

Make	Туре	Gap setting
	K16PR-U11	1.0 - 1.1 mm
DENSO	K20TNR-S	0.9 - 1.0 mm
	BKR5E-11	1.0 - 1.1 mm
NGK	BKURBEK	0.9 - 1.0 mm
30CH	PREDPX FREDCX FREDPX FREDCX	1,0 - 1.1 mm
CHAMPION	RC10YC4	10-11 mm

## **BLOW-BY GAS RECIRCULATION HOSE**

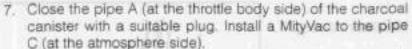
- Perform checking every two years or 40,000 kilometer running, whichever comes first.
- 2. Check that each hose is connected securely.
- Check each hose for damage and cracks.
- 4. Check the two hoses for restriction
- 5. If the hose is defective, clean or replace it.



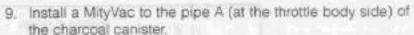
## CHARCOAL CANISTER

- Perform checking every two years or 40,000 kilometer running, whichever comes first.
- Take out the charcoal canister from the vehicle NOTE:
  - In order to prevent wrong connection of the pipes during the installation, put a tag on the connection of each pipe before disconnecting the pipes.
- Check the charcoal canister case for cracks or other damages;

- Close the pipe B of the charcoal canister (at the fuel tank) side) with a suitable plug. Install a MityVac to the pipe C (at the atmosphere side).
- Apply a negative pressure of about 30 kPa with a MityVac. Ensure that no air flows from the pipe A (at the throttle
- If the charcoal canister is defective, replace it.



8. Apply negative pressure with a MityVac. Ensure that air flows from the pipe B (at the fuel tank side). If the charcoal canister is defective, replace it.



10. Apply negative pressure with a MityVac. Ensure that air flows from the pipe B (at the fuel tank side) and pipe C (at the atmosphere side).

If the charcoal canister is defective, replace it. CAUTION:

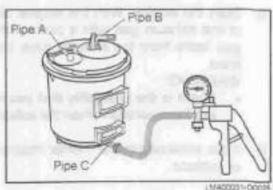
After the check has been conducted, if there is no defect, install the charcoal canister to the vehicle. Be sure to make connections at the piping with new hose bands and clips.

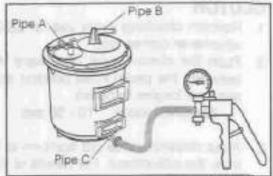
## EVAPORATIVE EMISSION HOSES

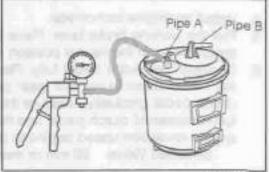
- Replace the hoses every eight years. CAUTION:
  - Be sure to make connections at the piping with new hose bands and clips.

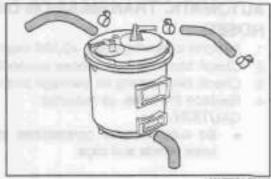
## EXHAUST PIPE & MUFFLER MOUNTING

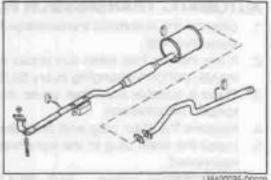
- Perform checking every year or 20,000 kilometer running. whichever comes first.
- If the vehicle has been run under severe driving environments, perform check every six months or 5,000 kilometer running, whichever comes first.
- Check the exhaust pipe and muffler for damage.
- 4. Check the mounting of the exhaust pipe and muffler for defects











Start the engine. With the engine idling, restrict the outlet. of the exhaust gas with a cloth or the like. Ensure that no gas leaks from the exhaust pipe, muffler or their connections.

#### WARNING:

- There is the possibility that you may burn yourself during this operation when the exhaust pipe is hot.
- If the exhaust pipe or muffler mounting is defective, repair or replace.

## CLUTCH

- Perform checking every year or 20,000 kilometer running. whichever comes first.
- Push the clutch pedal downward. Measure the distance between the pedal initial position and a point where a resistance begins to be felt.

Specified Value: 10 - 30 mm

- If the distance does not conform to the specification, perform the adjustment. For details of the adjustment, refer to Section MT.
- Install an engine tachometer.
- Pull the parking brake lever. Place the shift position of the transmission in the neutral position. Start the engine.
- Depress the clutch pedal fully. Place the shift position of the transmission in the first gear position. Disengage the clutch pedal gradually. Measure the distance between the fully-depressed clutch pedal and the pedal just before the engine revolution speed begins to drop.

Specified Value: 20 mm or more

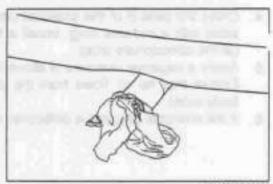
## AUTOMATIC TRANSMISSION OIL COOLER HOSES

- Perform checking every 40,000 kilometer running.
- Check each piping for loose connection.
- Check each piping for damage and cracks.
- Replace the hose, as required. CAUTION:
  - Be sure to make connections at the piping with new hose bands and clips.

## AUTOMATIC TRANSMISSION FLUID

- Change the automatic transmission fluid every 80,000 kilometer running.
- If the vehicle has been run under severe driving environments, perform changing every 50,000 kilometer running.
- 3. Place a suitable container under the drain plug of the automatic transmission.
- Remove the drain plug and drain the fluid.
- Install the drain plug to the transmission with a new gasket interposed

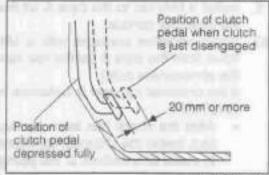
Tightening Torque: 19.6 - 29.4 N·m.

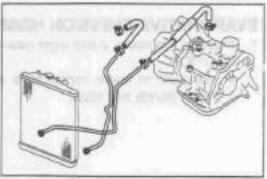


LMA00038-00030

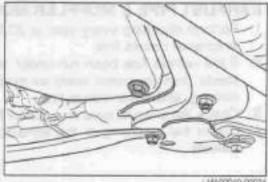


MA00007-00001





LMA00539-00013



LMA00040-0000

Fill the specified fluid from the filler tube.

Grade: ATF DEXRON® II or III Filling Amount: 1.9 liters

## NOTE:

For details of the operation, refer to Section AT.

## MANUAL TRANSMISSION OIL

- 1. Change the manual transmission oil every two years or 40,000 kilometer running, whichever comes first.
- 2. If the vehicle has been run under severe driving environments, change the manual transmission oil every 25,000 kilometer running.
- 3. Place a suitable container under the drain plug of the transmission.
- Remove the drain plug and drain the oil.
- Install the drain plug to the transmission with a new gasket interposed

Tightening Torque: 29.4 - 49.0 N·m

Fill the specified oil from the filler plug hole.

Grade: APIGL-3 or GL-4 Viscosity: SAE75W-85

Filling Amount: 2.1 - 2.25 liters

Install the filler plug to the transmission with a new gasket interposed.

Tightening Torque: 29.4 - 49.0 N-m

## NOTE:

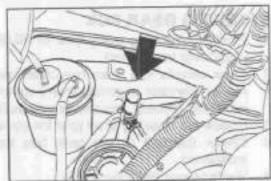
For details of the operation, refer to Section MT,

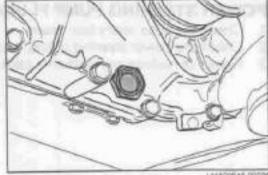
#### DRIVE SHAFT BOOT

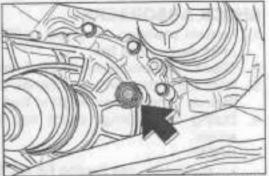
- Perform checking every year or 20,000 kilometer running. whichever comes first.
- Check the boot for damage and cracks.
- If the boot exhibits defects, replace it. Seal new grease. NOTE:
  - For the operation procedure, refer to Section FS.

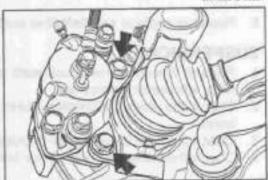
## STEERING LINKAGE

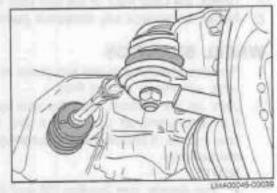
- Perform checking every year or 20,000 kilometer running. whichever comes first.
- 2. If the vehicle has been run under severe driving environments, perform checking every six months or every 5,000 kilometer running, whichever comes first.
- Check the dust cover of the tie rod end ball joint for cracks. and damage.
- Check the steering rack boot for cracks and damage.
- Repair or replace any defective parts.









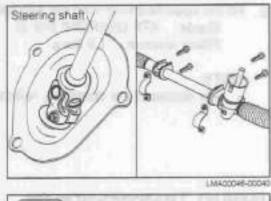


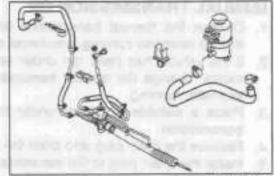
## STEERING GEAR BOX

- Perform checking every year or 20,000 kilometer running, whichever comes first.
- 2. If the vehicle has been run under severe driving environments, perform checking every six months or every 5,000 kilometer running, whichever comes first.
- Check the steering shaft joint for looseness.
- 4. Check the bolt of the gear box installation bracket for looseness.
- Replace any defective parts.

## POWER STEERING PUMP FLUID HOSE

- Check the hose every four years.
- Check the power steering piping system for fluid leakage.
- Repair or replace any defective parts.





## SHOCK ABSORBERS

- Perform checking every year or 20,000 kilometer running. whichever comes first
- Check the shock absorber for oil leakage and damage.
- 3. Rock the vehicle with your hands. Check to see if rocking finishes within a short length of time.
- 4. During this rocking, check that there is no abnormal sound.

#### NOTE:

- For details, see Section FS and Section RS.
- Repair or replace any defective parts.

## SUSPENSIONS

- Perform checking every two years or 40,000 kilometer running, whichever comes first.
- 2. Check the front suspension lower arm for damage and
- Check the front stabilizer for damage and bend.
- 4. Check the bolts and nuts at the bracket section for loose-
- Check the dust boot of the ball joint section for damage.
- Repair or replace any defective parts.

## WHEEL BEARINGS

- 1. Perform checking every two years or 40,000 kilometer running, whichever comes first.
- Jack up the vehicle. Hold the tyre by your hands and rock. it in a fore-and-aft direction. If you feel excessive play at your hands, it shows that the bearing is defective. Replace the bearing.

## NOTE:

· For details, see Section FS and Section RS.







## WHEEL ALIGNMENT

 Perform checking every two years or 40,000 kilometer running, whichever comes first.

Specified Values:

Camber

Caster

Kingpin angle

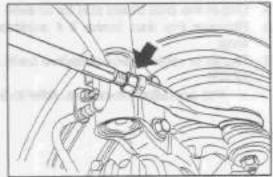
Toe-in

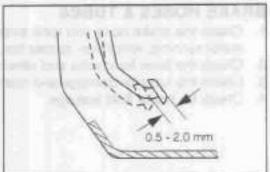
#### NOTE:

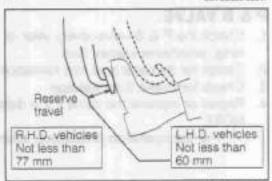
It is impossible to adjust or change the camber, caster, or kingpin angle. If the camber, caster, or kingpin angle does not conform to the specification, check to see if the frame has been damaged. Correct the frame, as required.



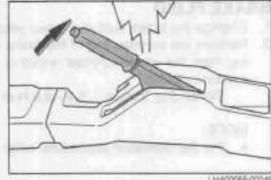
\_MADDOS1-00045







JMR00054-00



MA00045-000

## BRAKE PEDAL

- Perform checking every year or 20,000 kilometer running, whichever comes first.
- 2. With the engine stopped, depress the brake pedal five times or more so as to eliminate the negative pressure inside the brake booster.
- 3. Push the brake pedal downward by your hand. Measure the distance between the pedal initial position and the point where resistance begins to be felt.

Specified Value: 0.5 - 5 mm

- 4. If the measured distance does not conform to the specification, perform the adjustment. For details of the adjustment procedure, refer to Section MT.
- With the parking brake released, depress the brake pedal with a force of 300 N. Measure the distance between the pedal and the floor surface facing to the pedal.

Specified Values:

R.H.D. vehicles: 77 mm or more L.H.D. vehicles: 60 mm or more

## PARKING BRAKE

- Perform checking every year or 20,000 kilometer running, whichever comes first.
- 2. With the parking brake lever completely released, pull up the lever with a force of 196 N. Count how many times the clicking sound of the notch takes place from the initial position, until the lever stops. The parking brake is normal if the click sound takes place four to seven times.
- 3. Perform the adjustment, as required.
  - · For the adjustment procedure, refer to Section BR.

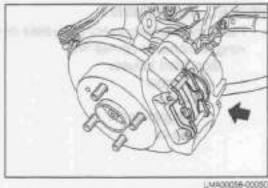
## FRONT BRAKE DISC & DISC PAD

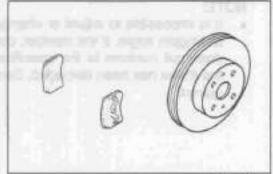
- Perform checking every year or 20,000 kilometer running. whichever comes first.
- If the vehicle has been run under severe driving environments, perform the checking every six months or 5,000 kilometer running.
- Check the thickness of the disc brake pad.

Specified Value: 1 mm or more



- 5. Replace the disc brake if it exhibits damage or severe wear.
- 6. Repair or replace any defective parts. NOTE:
  - For operation procedure, refer to Section BR.

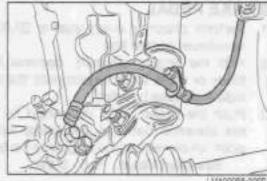




,W400087-00081

## **BRAKE HOSES & TUBES**

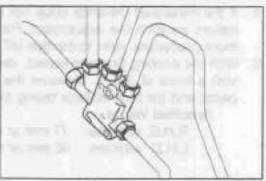
- Check the brake hose and tube every year or 20,000 kilometer running, whichever comes first.
- Check the hose for cracks and other defects.
- Check the tube for damage and rust formation.
- 4. Check for brake fluid leakage.



VIA00058-0005

## P & B VALVE

- Check the P & B valve every year or 20,000 kilometer running, whichever comes first.
- 2. Check for damage and rust formation.
- Check for brake fluid leakage.
- 4. Repair or replace the valve if it is defective. NOTE:
  - · For the operation procedure, refer to Section BR.



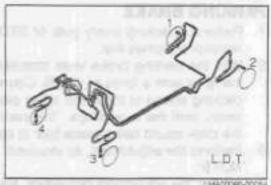
## BRAKE FLUID

Change the brake fluid every two years.

2. Perform the air bleeding of the brake hydraulic pipe, starting from the wheel cylinder which is the farthest from the master cylinder.

Tightening Torque: 6.9 - 9.8 N·m (Air bleeder plug)

For the operation procedure, refer to Section BR.



## BRAKE DRUMS & LININGS

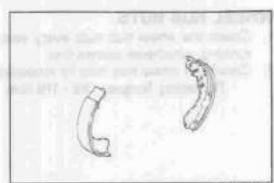
- Check the brake drum and lining every year or 20,000 kilometer running, whichever comes first.
- 2. If the vehicle has been run under severe driving environments, perform the checking every six months or 5,000 kilometer running, whichever comes first.
- Remove the brake drum and check the brake lining for uneven wear.
- Check the thickness of the brake lining. Specified Value: 1 mm or more
- Replace the brake drum if it exhibits damage or severe
- If there are defects, repair or replace. NOTE:
  - For the operation procedure, refer to Section BR.

Check the brake booster vacuum hose every four years.

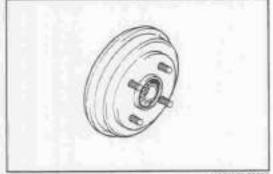
3. Check the vacuum hose for restriction and leakage, using

· When replacing the vacuum hose, be sure to use new

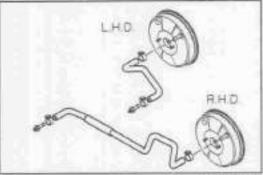
Check the vacuum hose for damage and cracks.

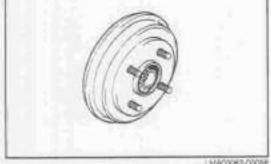


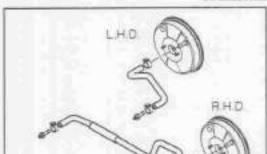
LV400081-00088

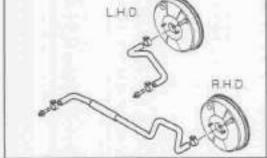


.WAC0062-00096









## MASTER CYLINDER

hose bands.

a MityVac.

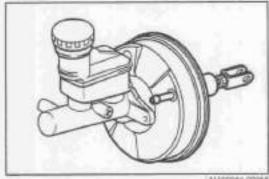
CAUTION:

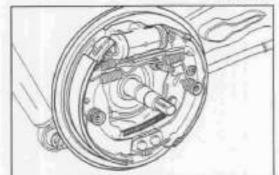
Check the master cylinder every two years.

BRAKE BOOSTER VACUUM HOSES

If there are defects, clean or replace.

- Remove the master cylinder from the booster. Check the master cylinder for brake fluid leakage.
- Check the master cylinder piston for wear. Also check the cup for damage or deterioration.
- Repair or replace any defective parts.





NA00068-00068

## WHEEL CYLINDERS

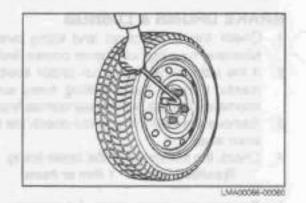
- 1. Check the wheel cylinders every two years.
- Check the wheel cylinder for brake fluid leakage.
- Check the wheel cylinder boot for damage.
- 4. Check the wheel cylinder piston for wear. Also check the cup for damage or deterioration. Repair or replace any defective parts.

## WHEEL HUB NUTS

 Check the wheel hub nuts every year or 20,000 kilometer running, whichever comes first.

Check the wheel hub nuts for looseness.

Tightening Torque: 89 - 118 N-m











CHAPTER CYLEROES

ABTER CYLEROES

Committee co

SARRY OF PRINCIPAL PRINCIP