

HONDA 360/400/600 SEDAN & VAN SHOP MANUAL (2nd Edition)

FOREWORD

This manual is prepared to provide the service personnel of Honda dealers with complete information on the maintenance and repair of Honda Car Models N360, N400, N600 and Station Wagon Model LN360 and their variants.

The information and instructions are grouped according to the type of work to be performed, such as diagnosis and testing, frequently performed adjustments and repairs, overhaul, etc. Specifications, special tools and maintenance instructions are found at each major section.

The section index on this page enables the reader to quickly locate any desired section. At the beginning of each section is a table of contents, which gives the locations of the major subjects in the respective section.

This manual should be kept where mechanics working on those Honda cars are able to reach easily at any time. If this manual is properly utilized and referred to, the workshop will be able to provide owners of Honda cars with better service and good reputation for reliable service.

This manual supersedes the manuals formerly provided for N600, N360 and LN360, and the future revisions to it will be made by means of revisional pages whenever the occasion calls for it.

All information, illustration and specifications contained in this manual are based on the latest product information available at the time of publication approval. The right is reserved to make any changes at any time, without notice.

For any inquiry and/or suggestions regarding this manual, please write to Publications Department, Service Division.

June 1970

**PUBLICATIONS DEPARTMENT,
SERVICE DIVISION,
HONDA MOTOR CO., LTD.**

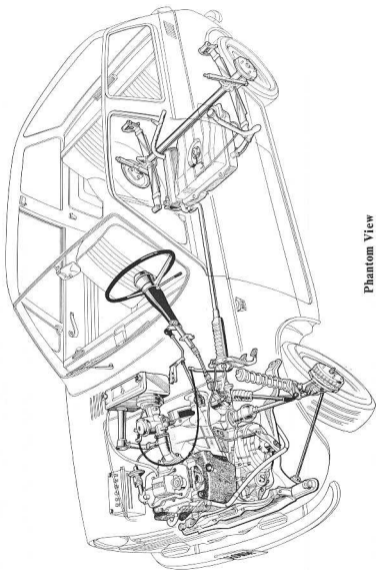
18-1, Horcho, Wako-shi, Saitama-ken, Japan

Section Index	
Title	Section
GENERAL INFORMATION	1
ENGINE TUNE-UP	2
DISMOUNTING POWER UNIT	3
ENGINE MECHANICAL	4
CLUTCH	5
TRANSMISSION-MANUAL	6
TRANSMISSION-HONDAMATIC	7
DIFFERENTIAL	8
DRIVE SHAFT	9
STEERING	10
BRAKES AND WHEELS	11
SUSPENSION	12
REAR AXLE	13
FUEL SYSTEM	14
EXHAUST SYSTEM	15
HEATER & VENTILATION	16
ELECTRICAL	17
BODY	18
PERIODIC MAINTENANCE	19
ALPHABETICAL INDEX	20

SECTION 1

GENERAL INFORMATION

A. Model and Type	1-1
B. Serial Number and Identification Plate	1-1
1. Standard Vehicle	1-1
2. Vehicles Destined for Export to <u>Germany, Denmark, Finland, Switzerland, Norway and Sweden</u>	1-2
3. Vehicle Destined for Export to <u>France</u>	1-2
4. Vehicle Destined for Export to <u>Belgium</u>	1-3
5. Vehicle Destined for Export to the <u>U.S.A.</u>	1-4
6. Vehicle Destined for Export to the <u>Australia</u>	1-4-2
C. General Data and Specifications	1-5
Physical Dimensions, HONDA N360/A360	1-7
Physical Dimensions, HONDA LN360	1-8
Physical Dimensions, HONDA N600/N400/A600	1-9
Physical Dimensions, HONDA 600 (Model for U.S.A.)	1-10
Performance Curve, HONDA N360/LN360	1-11
Performance Curve, HONDA N400	1-12
Performance Curve, HONDA N600	1-13
Performance Curve, HONDA A360/A600	1-14
Performance Curve, HONDA NEW N600	1-14-1
D. Keys and Locks	1-15
a. Key	1-15
b. Ignition switch assembly	1-16
c. Door Lock Assembly	1-16
d. Trunk lid lock assembly	1-17
E. Lubrication	1-18
Lubrication Cart	1-18
1. Changing Engine Oil	1-19
2. Automatic Transmission Fluid	1-20
3. Brake Master Cylinder	1-20
4. Front Wheel Bearing	1-21
5. Joint Section of Drive Shaft	1-21
6. Petal Linkage	1-21
7. Steering Horn Bushing	1-21
8. Rear Wheel Bearing	1-21
9. Steering Ball Joint	1-21
10. Suspension Ball Joint	1-21
11. Steering Gear Box	1-21
12. Shift Lever Linkage	1-21
13. Parking Brake Lever Linkage	1-21
Lubricants	1-22
F. Fuel	1-22
G. Torque Specifications	1-23
H. Special Service Tool	1-24



Phantom View

A. Model and Type

The following is a table of models and types described in this shop manual.

Type	Engine	Model	Transmission
N360	354cc (21.4 cu-in.)	2-door Sedan	Manual
A360		2-door Sedan	Automatic
LN360		Van	Manual
N400	401cc (24.4 cu-in.)	2-door Sedan	Manual
N600	594cc (36.5 cu-in.)	2-door Sedan	Manual
A600	594cc (36.5 cu-in.)	2-door Sedan	Automatic

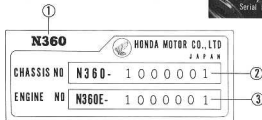
B. Serial Number and Identification Plate

1. Standard vehicle

The serial number plate is fixed on a fender on the right-hand side of the vehicle, as shown in Fig. 1B-1.



Fig. 1B-1



- ① Type N360/A360/LN360/N400/N600/A600/AN600 (Model for USA, Manual vehicle)/AA600 (Model for USA, Automatic vehicle)/N600G(DELUXE)
- ② Chassis No. N360/A360/LN360/N400/N600/A600/AN600/AA600
 360 Vehicle—starts with 1,000,001
 400 Vehicle—starts with 1,000,001
 600 Vehicle—starts with 1,000,001
- ③ Engine No. N360E—N360 and LN360 starts with 1,000,001
 A360 starts with 8,000,001
 N400E—N400 starts with 1,000,001
 N600E—N600 starts with 1,000,001
 A600 starts with 5,000,001

1-2 GENERAL INFORMATION



Fig. 1B-2

2. Vehicles destined for export to Germany, Denmark, Finland, Switzerland, Norway and Sweden.

The identification plate is fixed on the right side front fender inner panel, on the back side of the battery, as shown in Fig. 1B-2.

SPECIFICATIONS		
① MAKE :	HONDA	④ CHASSIS NO: 1000001
① TYPE :	N360	⑤ ENGINE NO: 1000001
② ENGINE TYPE :	N360E	PASSENGER CAPACITY : 4
NO OF AXLES :	2	⑥ MAX ALLOWED WEIGHT ON AXLE
③ MAX WEIGHT :	855 kg	F. 430 kg
MODEL	SEDAN	R. 430 kg
DATE OF MANUFACTURE :		
HONDA MOTOR CO.,LTD. JAPAN		

① Type N360/A360/N400/N600/A600/N600G

② Engine type N360E/N400E/N600E

③ Max. weight N360 855 kg
A360/N400/N600 900 kg
A600 930 kg
N600G 950 kg

④ Chassis No. N360/A360/N400/N600/A600
360 Vehicle—starts with 1,000,001
400 Vehicle—starts with 1,000,001
600 Vehicle—starts with 1,000,001

⑤ Engine No. N360E—Starts with 1,000,001 (N360)
N360E—Starts with 8,000,001 (A360)
N400E—Starts with 1,000,001
N600E—Starts with 1,000,001 (N600)
N600E—Starts with 5,000,001 (A600)

⑥ Max. allowed weight on axle

	N360	A360	N400	N600	A600	N600G
F	430 kg	510 kg	510 kg	480 kg	510 kg	510 kg
R	430 kg	465 kg	480 kg	465 kg	480 kg	480 kg

3. Vehicles destined for export to France.

The identification plate is fixed on the right-side front fender inner panel, on the back side of the battery, as the one above. (Refer to Fig. 1B-2)

CARACTERISTIQUES			
MARQUE :	HONDA	CHASSIS NO :	1 0 0 0 0 0 1
TYPE :	N360	MOTEUR NO :	1 0 0 0 0 0 1
NOMBRE DE PLACES :	4	POIDS A VIDE	505 kg
MODELE :	BERLINE	POIDS EN CHARGE	855 kg
HONDA MOTOR CO., LTD. JAPAN			

① TYPE

② CHASSIS No.

③ MOTEUR No.

Same as Section 2. Refer to Section 2 on the preceding page.

	N360	A360	N400	N600	A600	N600G
④ POIDS A VIDE	505 kg	550 kg	540 kg	550 kg	570 kg	550 kg
⑤ POIDS EN CHARGE	855 kg	900 kg	900 kg	900 kg	930 kg	950 kg

4. Vehicles destined for export to Belgium.

As in the case of a standard vehicle described in Section 1, the serial number plate is found on the right fender. (Refer to Fig. 1B-1)

■ MERK MARQUE	HONDA	TYPE N360
■ CHASSIS N° N° DU CHASSIS	N360-	1 0 0 0 0 0 1
■ P V G P V A		37/06
■ M T G P M A		900 kg
■ M T G S P M A T		1050 kg
HONDA MOTOR CO., LTD. JAPAN		

① TYPE

② CHASSIS N°

N° DU CHASSIS

Same as Section 1

	N360	A360	N400	N600	A600	N600G
④ P V G P V A	37/06	37/06	40118	37/05	37/05	40.182
④ M T G P M A	900 kg	900 kg	900 kg	900 kg	900 kg	950 kg
⑤ M T G S P M A T	1050 kg	1050 kg	1050 kg	1150 kg	1150 kg	1200 kg

1-4 GENERAL INFORMATION

5. Vehicles destined for export to the U.S.A.

The vehicles shipped to the U.S.A. has the identification plate at the front edge of the instrument panel. The specification placard is attached in the glove box and the certificate plate is located on LH center pillar while the vehicle emission control information plate is on the LH fender inner panel.

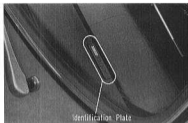


Fig. 1B-3



Fig. 1B-4a



Fig. 1B-4b



Fig. 1B-4c

Identification Plate

AN600 - 1 0 1 9 3 2 3

A carved stamp of the chassis number is fixed on the identification plate.

Specification Placard


IMPORTANT			
		UP TO	VEHICLE LOAD LIMIT
COLD TIRE PRESSURE:		FRONT 30 psi	REAR 24 psi
VEHICLE LOAD LIMIT:		650 lbs.	
SEATING CAPACITY :	TOTAL	4	FRONT 2 REAR 2
TIRE SIZE :		5.20-10	BIAS PLY

Certificate Plate

MFD IN JAPAN BY HONDA MOTOR CO., LTD. :
 3 / 70 : THIS VEHICLE CONFORMS TO ALL APPLICABLE
 U. S. FEDERAL MOTOR VEHICLE SAFETY STANDARDS IN
 EFFECT ON THE DATE OF MANUFACTURE SHOWN ABOVE :
 V. I. N. AN600-1019620

Vehicle Emission Control Information Plate

VEHICLE EMISSION CONTROL INFORMATION
 HONDA 600 SEDAN

HONDA MOTOR CO., LTD. 

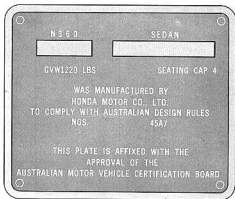
ENGINE DISPLACEMENT : 36.5 CU IN (598CC)
 IGNITION TIMING (STATIC) : 10° BTDC
 POINT GAP : .012 — .016 IN (.3 — .4MM)
 DWELL : 90°
 SPARK PLUG TYPE : NGK B8ES
 GAP : .028 — .032 IN (.7 — .8MM)
 IDLE SPEED : MANUAL TRANSMISSION 1100-1200 RPM
 (AT NORMAL OPERATING TEMP.) AUTOMATIC 900-1000 RPM IN 'D'
 RANGE

SEE HONDA SHOP MANUAL FOR ADDITIONAL INFORMATION
 THIS VEHICLE CONFORMS TO U.S. DEPT. OF H.E.W. REGULATIONS APPLICABLE TO
 1970 MODEL YEAR NEW MOTOR VEHICLES

1-4-2 GENERAL INFORMATION

6. Vehicles destined for export to the Australia

The compliance plate is attached on the right side front fender inner panel which is on the back side of the battery.



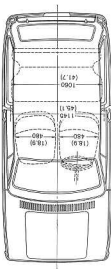
C. General Data and Specifications

	N360	A860	LN360	N400	N600	A600	Model for U.S.A.	
							AN600	AA600
DIMENSIONS								
Overall length		3,025mm (119.1 in.)	3,125mm (123.0 in.)	3,100mm (122.0 in.)	3,100mm (122.0 in.)	3,175mm (125.0 in.)		
Overall width		1,295mm (51.0 in.)	1,295mm (51.0 in.)	1,330mm (52.4 in.)	1,330mm (52.4 in.)	1,335mm (52.6 in.)		
Overall height				160mm (6.3 in.)				
Minimum ground clearance								
Overhang: Front		530mm (21.7 in.)						605mm (23.8 in.)
Rear		475mm (18.7 in.)		2,000mm (78.7 in.)	605mm (19.9 in.)	572mm (22.5 in.)		
Wheelbase								
Tread: Front			1,150mm (45.3 in.)					1,170mm (46.1 in.)
Rear			1,105mm (43.4 in.)					1,135mm (44.7 in.)
WEIGHT								
Curb weight	505kg (1,114 lbs)	550kg (1,213 lbs)	545kg (1,201 lbs)	550kg (1,213 lbs) 600kg (1,323 lbs) -N600G	580kg (1,279 lbs)	615kg (1,356 lbs)		
Seating capacity	4	4	4 (or 2)	4	4	4	4	4
Maximum cargo capacity	—	—	200kg (441 lbs)	—	—	—	—	—
Distribution of weight:								
Unladen:					370kg (816 lbs)			
Front	338kg (745 lbs)	375kg (827 lbs)	350kg (772 lbs)	355kg (605 lbs)	400kg-N600G	395kg (871 lbs)	882 lbs (400 kg)	
Rear	167kg (368 lbs)	175kg (386 lbs)	195kg (430 lbs)	185kg (408 lbs)	180kg(397lbs) 200kg-N600G	185kg (408 lbs)	474 lbs (215 kg)	
Maximum loaded:					480kg 53% (1058 lbs)			
Front	430kg 50% (948 lbs)	434kg 44.9% (957 lbs)	460kg 51% (1014 lbs)	495kg 52.1% (1080 lbs) -N600G	490kg 52.7% (1080 lbs)	1113.5lbs(51.4%) (505kg)		
Rear	430kg (948 lbs)	531kg (1,171 lbs)	440kg (970 lbs)	440kg (970 lbs)	465kg-N600 (1025 lbs)	440kg (970 lbs)	893 lbs (405kg)	
Power unit weight	87kg (192 lbs)	108kg (238 lbs)	87kg (192 lbs)	96.5kg (192 lbs)	96.5kg (213 lbs)	114kg (251 lbs)	213 lbs (96.5kg)	251 lbs (114kg)

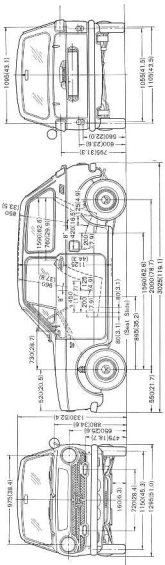
1-6 GENERAL INFORMATION

	N360	A360	LN360	N400	N600	A600	Model for U.S.A.	
							AN600	AA600
PERFORMANCE								
Maximum power output	34 bhp(8,500 rpm (SAE)) 27 ps(8,000 rpm (DIN))			33 bhp(8,000rpm (SAE)) 29 ps(7,500rpm (DIN))	45 bhp(7,000rpm (SAE)) 42 ps (6,500rpm (DIN)) Modified engine 36 bhp(6,000rpm (SAE)) 32 ps (6,000rpm (DIN))	A600	AN600	AA600
Maximum torque	3.0 kg-m/(5,500 rpm) (21.7 ft-lb/(5,500 rpm))			3.1 kg-m/ 5,500 rpm	5.2 kg-m/(5,000rpm) (37.6 ft-lb/(5,000rpm)) Modified engine 4.4 kg-m/(4,000rpm) (31.8 ft-lb/(4,000rpm))			
Fuel consumption with full load	220 g/ps-h (at 5,500 rpm)							
Maximum safe tilting angle (right and left)	46°	48°	46°	43°	47°	48°	48°	48°
Turning circle	9.4m (30.8 ft.)							
	9.5m (31.2 ft.)							

Physical Dimensions, HONDA N360/A360



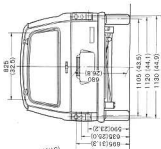
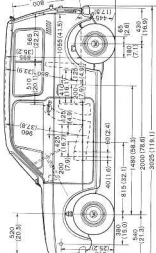
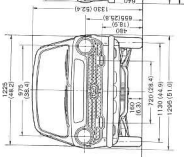
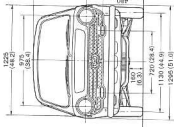
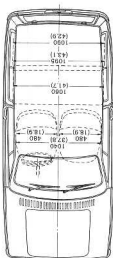
Unit: mm(in.)



1-8 GENERAL INFORMATION

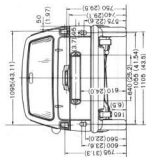
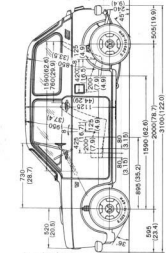
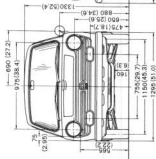
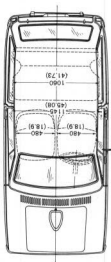
Physical Dimensions, HONDA LN360

Unit: Inch



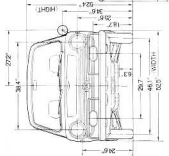
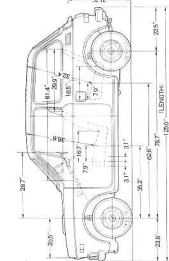
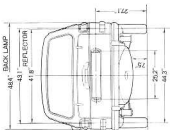
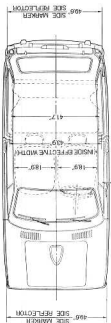
Physical Dimensions, HONDA N600/N400/A600

Unit : mm(%)

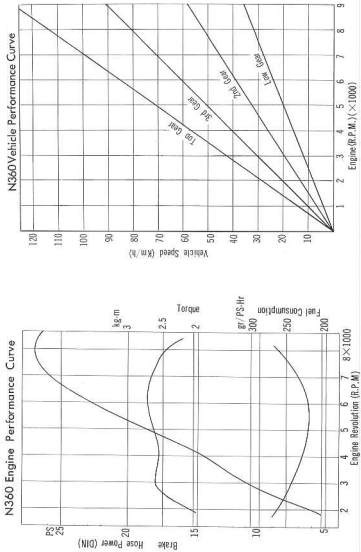


Physical Dimensions, HONDA600 (Model for U.S.A.)

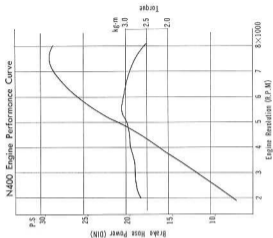
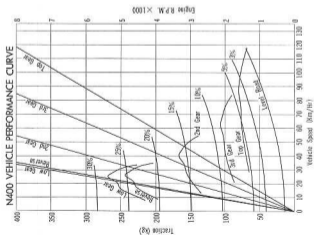
Unit: inch



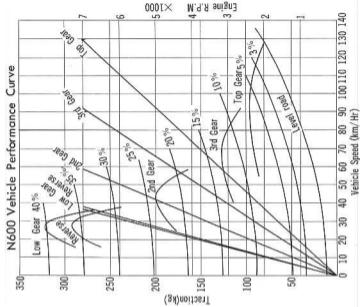
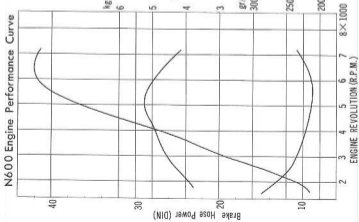
Performance Curve, HONDA N360/LN360



Performance Curve, HONDA N400

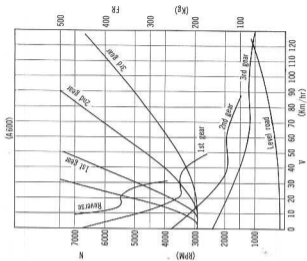
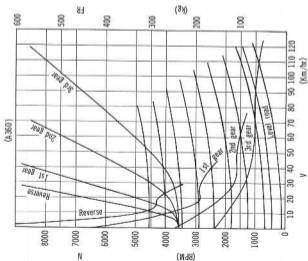


Performance Curve, HONDA N600



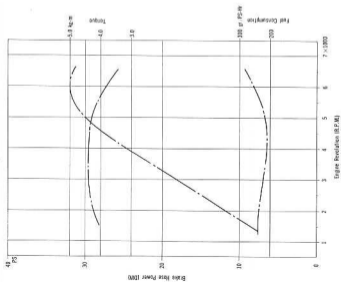
1-14 GENERAL INFORMATION

Performance Curve, HONDA A360/A600

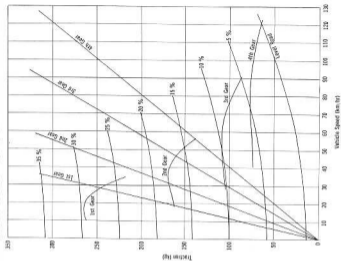


Performance Curve, HONDA New N600

New N600 Engine Performance Curve.



New N600 Vehicle Performance Curve.



Performance Curve, HONDA New A600

This curve is to follow.

D. Keys and Locks

Locks of the identical structure are used for the ignition switch, doors and trunk lid so that a single key can serve a multiple purpose of ignition, and opening and closing of both door locks and the trunk lid.

Fig. 1D-1 shows the ignition switch assembly and the key, Fig. 1D-2 the door locks, Fig. 1D-3 the trunk lid lock and the key.

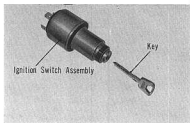


Fig. 1D-1

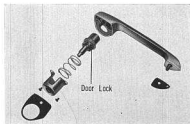


Fig. 1D-2

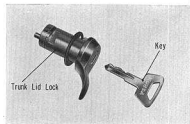


Fig. 1D-3

a. Key

A six digit number is engraved on each key. The first figure of a number on a key represents its groove shape and the rest is angular shapes.

A blank key with only a groove shape and without angular shapes has been prepared which makes it possible to duplicate a key by cutting angular shapes into it.

It is necessary for a motorist using the key to have a duplicate ready before he loses the key or when he wants spare keys on hand. Otherwise it may become necessary to change all three lock assemblies.

How to duplicate:

After finding proper blank key, properly position both the original and the blank on a key cutter; and cut the key teeth on the blank key by tracing the teeth of original.

Original key is positioned on the adaptor; tracing needle traces the profile of the original. Thus the blank is processed by the cutter.

Since such a cutter is available world over, it should be easy to prepare duplicates with the blank keys.

If it ever becomes necessary to change a lock assembly, do it properly by following procedures described in sections b, c, and d.

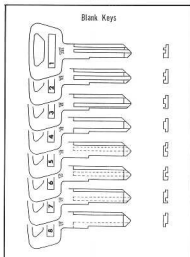


Fig. 1D-4



Fig. 1D-5



Fig. 1D-6



Fig. 1D-7

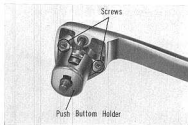


Fig. 1D-8

b. Ignition switch assembly

By using an ignition switch wrench in the special tool set, remove the ignition switch lock nut. Take out the washer and also the ignition switch assembly from the back side of the instrument panel. The switch assembly can be detached if the wire harness is pulled out of the switch.

Make sure to replace the washer before screwing the lock nut when reassembling the switch. (Fig. 1D-6)

Firmly insert the wire harness into the ignition switch assembly before fixing it on the instrument panel. (Fig. 1D-7)

- B terminal — white
- IG terminal — black with yellow stripes
- ST terminal — black with white stripes

Vehicles destined for shipment to Germany and Denmark have both the ignition switch and the steering lock assembly installed on the steering column.

c. Door lock assembly

Detach the outside handle from the door by first removing the door lining and then two nuts from the inside of the door. (For details, refer to SECTION 18. BODY).

Next, detach the lock assembly by removing the two screws and the push-button holder. (Fig. 1D-8 and 1D-2)

d. Trunk lid lock assembly

Open the trunk lid and remove the bolts holding the lock assembly. (Fig. 1D-9)

Next, take out the lock cylinder setting spring using a screwdriver. Both the lock cylinder and the lock holder can be detached. (Fig. 1D-10)

When reassembling the trunk lid lock, make sure to fix the gasket in its original place in the lock cylinder as it prevents water from entering the rear compartment.

The setting spring is fit into the groove of the lock cylinder. (Fig. 1D-11)

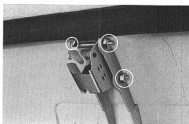


Fig. 1D-9

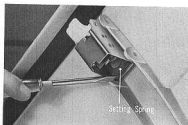


Fig. 1D-10

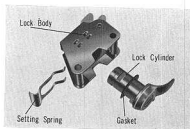
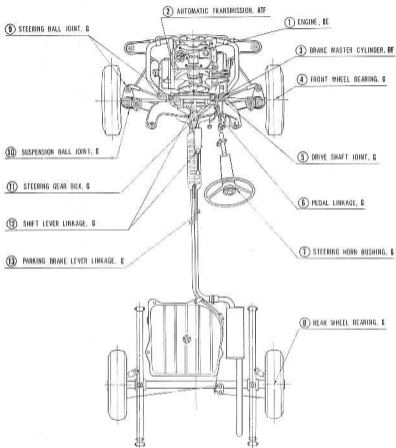


Fig. 1D-11

E. Lubrications

Lubrication Chart



Remarks :

- OE: Engine Oil
 G: Grease
 ATF: Automatic
 Transmission
 Fluid
 BF: Brake Fluid

No.	Oil and grease inlets	Type of Oil and Grease	First 1,000 km (600 miles)	5,000 km (3,000 miles) when running	Remarks
1	Engine, Transmission Differential	Engine oil	Change	Change	Only for gear-transmission cars
	Engine	Engine oil	Change	Change	Hondamatic only
2	Automatic transmission	ATF	Add if necessary. Change after every 20,000 km (12,000 miles)		Hondamatic only
3	Brake master cylinder	Brake oil	Add if necessary after checking		
4	Front wheel bearing	Grease	Supply or change after every 50,000 km (30,000 miles)		
5	Drive shaft joint	Grease	Factory sealed-lubrication system, oil supplied only during overhaul.		
6	Pedal linkage	Grease			
7	Steering horn bushing	Grease			
8	Rear wheel bearing	Grease	Supply or change after every 50,000 km (30,000 miles)		
9	Steering ball joint	Grease	Factory sealed-lubrication system, oil supplied during overhaul.		
10	Suspension ball joint	Grease			
11	Steering gear box	Grease			
12	Shift lever linkage	Grease			
13	Parking brake lever linkage	Grease			

*Refer to page 1-22 "Lubricants" when selecting both the type and quality of oil and grease to be used.

1. Changing Engine Oil

In the vehicles equipped with gear transmissions, engine oil is supplied to the engine, transmission and differential. It is not necessary to supply transmission and differential oils. In the vehicles equipped with automatic transmission, the engine is lubricated by engine oil, and the transmission and differential by A.T.F. as in the case of torque converters.

Although engines are sufficiently lubricated with high quality Honda Ultra Oil before the cars are shipped out, it is still desirable to have the oil changed as indicated on page 1-22 depending on the time of delivery and the period of storage prior to sale.

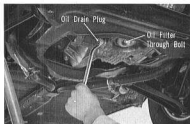


Fig. 1E-2



Fig. 1E-3



Fig. 1E-4

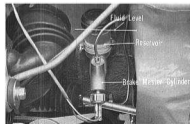


Fig. 1E-5

Change oil according to the following instructions after new cars have traveled 1,000 km (600 miles) and after every 5,000 km (3,000 miles) thereafter. Remove the drain plug after detaching the filler cap and drain oil completely. If the drain plug is too tight for easy removal, strike its edge with a hammer to loosen it slightly.

It is desirable to change engine oil when the engine is still warm. This is to ensure complete drainage of old oil.

Tighten the drain plug firmly after oil has been drained completely and supply new oil to the engine. (Fig. 1E-3)

Pour oil up to the upper limit of the oil level gauge.

Capacity:

Gear-transmission car	3.0 lit. (2.6 Imp. qt., 3.2 US qt.)
Hondamatic car	2.5 lit. (2.2 Imp. qt., 2.6 US qt.)

Changing Oil Filter Element

The oil filter element is changed after the first 5,000 km (3,000 miles) and every 10,000 km (6,000 miles) thereafter.

Remove the filter cover after taking out the oil filter through bolt to detach the element. (Fig. 1E-2 and 1E-4)

Inspect the presence of any oil leak by starting the engine. Do this after installing the new element.

2. Automatic Transmission Fluid

After every 5,000 km (3,000 miles), check the condition of automatic transmission fluid and add some if the quantity is insufficient.

Change the fluid after every 20,000 km (12,000 miles). For details of instruction on changing the fluid, refer to SECTION 7. TRANSMISSION-HONDAMATIC.

3. Brake Master Cylinder

Check the amount of fluid in the brake after the first 1,000 km (600 miles) and supply fluid if necessary. Make the next check after 5,000 km (3,000 miles), and then every 5,000 km (3,000 miles) thereafter. (Fig. 1E-5)

4. Front Wheel Bearing

There is unnecessary to grease the front wheel bearing during the first 50,000 km (30,000 miles). A grease nipple is not installed at this location as a result. Even after the 50,000 km (30,000 miles), it may not be necessary to change grease at the time of the check. A supplementary supply of grease is normally adequate.

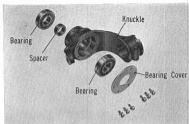


Fig. 1E-6

5. Joint Section of Drive Shaft

The joint of the drive shaft consists of the outboard joint and the inboard joint and is of the factory sealed lubrication system. There is, consequently, no need to regularly supplement oil or to change it. In vehicles in the 360cc class, a double cross universal joint is used for the outboard joint and a constant speed ball joint for the inboard joint.

The constant speed ball joint is used for both the outboard and inboard joints of cars belonging in the 400cc and 600cc classes.

Check the bellows for damage. There is no need to change grease if the bellows is not damaged. Inspection of the double cross universal joint is necessary to replenish grease and also change the cross shaft and the needle bearing if tear and wear is obvious. Refer to SECTION 9. DRIVE SHAFT for instructions.

6. Pedal Linkage

7. Steering Horn Bushing

It requires only light greasing at the time of an overhauling.

8. Rear Wheel Bearing

Refer to Section 4. for instructions as they are the same as those for the front wheel bearing. As for instruction related to changing, refer to SECTION 13 REAR AXLE.

9. Steering Ball Joint

Being a factory sealed-lubrication system, it requires only light greasing at the time of an overhaul. Refer to SECTION 10. STEERING for details.

10. Suspension Ball Joint

There is no need for either greasing or oiling because the ball joint section of the front suspension lower arm has been lubricated at the time of assembly. Change parts if wear and tear is considerable during inspection at the time of overhaul.

11. Steering Gear Box

Even though this box is of the factory-sealed-lubrication type, apply grease to it by fitting the greasing adapter whenever irregular noise is heard.

Refer to SECTION 10. STEERING for details.

12. Shift Lever Linkage

13. Parking Brake Lever Linkage

Although the linkage is of the factory-sealed-lubrication type, it is desirable to apply grease lightly at the time of overhaul.

1-22 GENERAL INFORMATION

Lubricants

To get the maximum benefit from vehicle, it is vitally important to pay attention to the type of oil and grease to be used, in addition to performing daily inspection. Generally, in automobile engines, the characteristic will differ for each type, such as, the operating temperature, lubrication system, oil breather diameter, the various clearances etc., therefore, the oils to be used must be compatible to the respective type engine. The oils must also be changed at the intervals specified in the servicing schedule. By so doing, an economical and extended trouble-free operation can be maintained.

The extended use of dirty oil or oil which has become diluted will seriously damage the engine and will shorten its serviceable life. It is recommended that quality oil of API Service Classification with MS grade or better be used. This class oil is superior in heat and oxidation stability, in addition, considerable attention has been given to the compounding of chemical additives to obtain higher load carrying and detergency characteristics so that it will be able to cope with conditions encountered under different driving situations. Further, select from the table the oil which has the proper viscosity for the temperature. In other words the selection of oil should be based on the quality and the proper viscosity which is suited to the operating conditions.

TEMPERATURE	GRADE	CLASS		
		API Service	ASTM	
Single Grade	-20°C (-4°F) to 0°C (32°F)	SAE 10W	MS	G-IV
	0°C (32°F) to 15°C (59°F)	SAE 20W SAE 20	MS	G-IV
	15°C (59°F) to 30°C (86°F)	SAE 30	MS	G-IV
	Above 30°C (86°F)	SAE 40	MS	G-IV
Multigrade	Above -15°C (5°F)	SAE 10W/40	MS	G-IV
	-15°C (5°F) to 30°C (86°F)	SAE 10W/30	MS	G-IV
	Above 0°C (32°F)	SAE 20W/40	MS	G-IV
Grease	Multipurpose	NL GI No. 2	Multipurpose Type	

Note:

1. Temperature indicated in the table is the average atmospheric temperature anticipated: which is provided as a standard of the temperature zone.
2. Engine, transmission and differential are integral unit sowed in the crankcase, therefore, lubricant is required only in the crankcase. (Manual transmission gearshift car.)
3. In an extremely cold area, where the average atmospheric temperature is below -20°C (-4°F), grade SAF 5W oil may be used. However, make sure to change to the suitable oil when the atmospheric temperature rises.

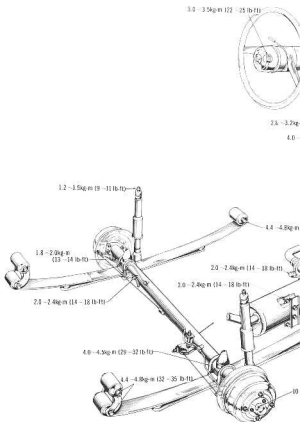
F. Fuel

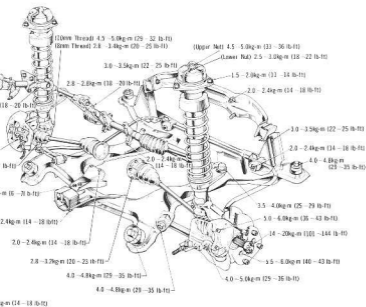
Regular grade gasoline is used for all cars under N-series. Since the combustion chamber form is designed in such a way as to be exceptionally strong against knocking, it is not necessary to use high octane gasoline.

However, overseas where gasoline of low octane value is marketed, it is desirable to obtain gasoline containing a high value of octane for its use.

In case of severe knocking after rapid acceleration during running, delay the time of ignition by 5° as compared to standard ignition since it is caused by gasoline containing a low octane value. Refer to SECTION 2. ENGINE TUNE-UP, for adjustment of the ignition timing.

G. TORQUE SPECIFICATIONS





g-m (14 - 18 lb-ft)

8 lb-ft)

H. SPECIAL SERVICE TOOL LIST (See page 7-174 for automatic trans

Standard Tools

REF. NO.	TOOL NAME	TOOL NO.	N300/LN300	MODEL	Notes	REMARKS
1-1	Inlet Valve Seat Cutter, 90°	02001-52104	○	○		
-2	"	02001-56804	○	○	○	
2-1	Exhaust Valve Seat Cutter, 90°	02002-52104	○	○		
-2	"	02002-56804	○	○	○	
3-1	Inlet Valve Seat Cutter, 120°	02003-52104	○	○		
-2	"	02003-56804	○	○	○	
4-1	Exhaust Valve Seat Cutter, 120°	02004-52104	○	○		
-2	"	02004-56804	○	○	○	
5-1	Inlet Valve Seat Cutter, 90°	02005-52104	○	○		
-2	"	02005-56804	○	○	○	
6-1	Exhaust Valve Seat Cutter, 40°	02006-52104	○	○		
-2	"	02006-56804	○	○	○	
7	Valve Seat Cutter Holder	02007-52100	○	○	○	
8	Valve Guide Reamer	02008-52100	○	○	○	
9	Brake Drum Puller	02009-52100	○	○	○	
10-1	Steering Wheel Puller (A)	02010-51200	○	○	○	
-2	"	02010-51200	○	○	○	For servicing N600G and N600 Deluxe only
11-1	Boiler Remover	02011-56100	○	○	○	
-2	"	02011-56800	○	○	○	
12	Boiler Holder	02012-56800	○	○	○	
13	Valve Lifter	02013-25001	○	○	○	
14-1	Piston Ring Compressor	02014-55100	○	○	○	
-2	"	02014-56800	○	○	○	
-3	"	02014-56801	○	○	○	
15	Piston Stops	02015-25001	○	○	○	
16-1	Front Damper Spring Compressor Main	02016-50110	○	○	○	
-2	"	02016-50115	○	○	○	Set No. 02014-30100
-3	"	02016-50116	○	○	○	
17	Belkrone Band Tensioner	02017-52100	○	○	○	
18-1	Drive Shaft Replacer Main	02018-56805	○	○	○	
-2	"	02018-56810	○	○	○	Used as a unit (02018-56805)
-3	"	02018-56820	○	○	○	For servicing Zima thread dia. spindle only
19	Valve Guide Driver	02019-52104	○	○	○	
20	Shift Rod Pin Driver	02019-52104	○	○	○	
21	Front Wheel Bearing Driver A	02018-52110	○	○	○	
22	Front Wheel Bearing Driver B	02018-52104	○	○	○	
23	Rear Wheel Bearing Driver	02018-56725	○	○	○	
24	Oil Seal Driver A (Kareball)	02014-52100	○	○	○	
25	"	02014-56800	○	○	○	
26	"	02017-52100	○	○	○	
27	Air Bleeder Tube	02019-52102	○	○	○	
28-1	Exhaust Pipe Fitting Driver	02065-52101	○	○	○	
-2	"	02065-56801	○	○	○	Area: R,D,E,F,N,F,Q,R,T,U,V
-3	"	02065-56802	○	○	○	4.1mm larger in dia. than 02065-56801 Area: A except Hawaii,C,G,J,S
29-1	Exhaust Pipe Removing Adapter	02066-56121	○	○	○	
-2	"	02066-56801	○	○	○	Area: R,D,E,F,N,F,Q,R,T,U,V
-3	"	02066-56802	○	○	○	4.1mm larger in dia. than 02066-56801 Area: A except Hawaii,C,G,J,S
30	Exhaust Silencer Fitting Driver	02066-56111	○	○	○	
31	Ignition Switch Wrench	02071-56800	○	○	○	
32	Crankshaft Pulley Holder	02072-52105	○	○	○	
33	Valve Clearance Adjusting Bar	02073-52100	○	○	○	
34-1	Wrench Handle	02083-96130	○	○	○	
-2	Socket (Stem)	02083-96130	○	○	○	
-3	"	02083-96135	○	○	○	
35	Rear Lining Tool	02084-52104	○	○	○	
36	Tie-rod Ball Joint Puller	02082-52100	○	○	○	
37	U-bolts Universal Joint Socket Wrench	02085-52104	○	○	○	
38	Universal Joint Socket Wrench Holder	02083-52100	○	○	○	
39	Spark Plug Wrench	02084-52104	○	○	○	
40	Reamer Handle	02096-89944	○	○	○	
41	Valve Seat Cutter Case	02087-52104	○	○	○	
42-1	Tools Set (N300/N400)	02100-51107	○	○	○	Area: all
-2	"	A-1 Set (N300)	02100-56800	○	○	Area: R,D,E,F,N,F,Q,R,T,U,V
-3	"	A-2 Set (N300)	02100-56811	○	○	Area: A,C,G,J,S
43-1	Tool Case (N300/N400)	02190-52105	○	○	○	
-2	"	A-1 Set (N300)	02190-56805	○	○	
-3	"	A-2 Set (N300)	02190-56818	○	○	



1 (a) 1 (b)



2 (a) 2 (b)



3 (a) 3 (b)



4 (a) 4 (b)



8



9



10 (a)



10 (b)



13



14 (a) ~ 14 (b)



15



18 (a)



18 (b)



19



20



25



26



27



28 (a) ~ 28 (c)



32



33



34



36



37



38

39



5 (a)

5 (b)



6 (a)

6 (b)



7



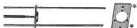
11 (a)



11 (b)



12



15 (a)



15 (b)



17



18 (a)



21



22



23



24



25 (a) ~ 29 (a)



30



31



34 (a)



34 (b)



34 (c)



35



40



41



42 (a) ~ (c)

43 (a) ~ (c)

al Tools

TOOL NAME	TOOL NO.	MODEL			REMARKS
		N380/LM380	N430	N500	
ig Set Drive Shaft Overhaul	05943-58188	○			
Spacer Unit Needle Bearing	05943-58118	○			
Spacer	05943-58113	○			
Spacer Unit Center Pin	05943-58126	○			
Washer	05943-58125	○			
Drive Shaft Replacing Socket Wrench	05993-58104	○	○		
Sealing Adaptor	05993-58001	○	○	○	Used only for late models
Spacer Booster overhaul Set	07145-57958				
Overhaul Unit	07003-57915				
Pressure Gauge A	07145-57965				
" B	07145-57960				
Pressure Gauge	07145-57918				
Harness C	07145-57928				1 set consists of 2 parts
" D	07145-57925				"
" E	07145-57988				
" F	07145-57985				1 Set consists of 2 parts
" I	07145-57985				
" J	07145-57988				

