CLUTCH
Article Text
1993 Honda Prelude
For Cadi Centre Nsk CA 95051

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ARTICLE BEGINNING

1993 Clutch

Prelude

DESCRIPTION

The clutch assembly is a single disc type with a diaphragm spring pressure plate. All models use a hydraulically-controlled clutch system consisting of a master cylinder, release cylinder, release lever and release bearing.

ADJUSTMENTS

CLUTCH PEDAL

1) Loosen lock nut "A", and back off clutch pedal switch "A" until it breaks contact with clutch pedal. SeeFig. 1. Loosen lock nut "C", and turn clutch pedal push rod until correct pedal height is obtained. See CLUTCH PEDAL SPECIFICATIONS table. Tighten lock nut "C" to specification. See TORQUE SPECIFICATIONS table at the end of this article.

2) Turn clutch pedal switch "A" in until it contacts clutch pedal. Turn switch in another 1/4-1/2 turn. Tighten lock nut "A" to specification. Loosen lock nut "B" and clutch pedal switch "B". Measure clearance between floor board and clutch pedal with clutch pedal fully depressed. See DISENGAGEMENT HEIGHT (FROM FLOOR) table.

3) Release clutch pedal .6-.8" (15-20 mm) from fully depressed position, and hold it there. Adjust position of clutch pedal switch "B" so engine will start with clutch pedal in this position. Turn clutch pedal switch in another 1/4-1/2 turn. Tighten lock nut "B" to specification.

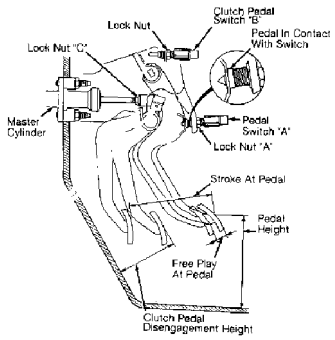

Fig. 1: Adjusting Clutch Pedal
Courtesy of American Honda Motor Co., Inc.

CLUTCH PEDAL SPECIFICATIONS TABLE

Application	Free Play In. (mm)	Pedal Height In. (mm)
Prelude	.04-.28 (1.0-7.0)	7.5 (190)

DISENGAGEMENT HEIGHT TABLE (FROM FLOOR)

Application	In. (mm)
Prelude	3.7 (94)

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

Removal

1) Remove positive and negative battery cables, and remove battery. Remove air intake hoses and battery base. Disconnect starter wiring, and remove starter. Disconnect transaxle ground cable. Disconnect back-up light switch. Remove shift cable stay and cables as an assembly. See Fig. 2.

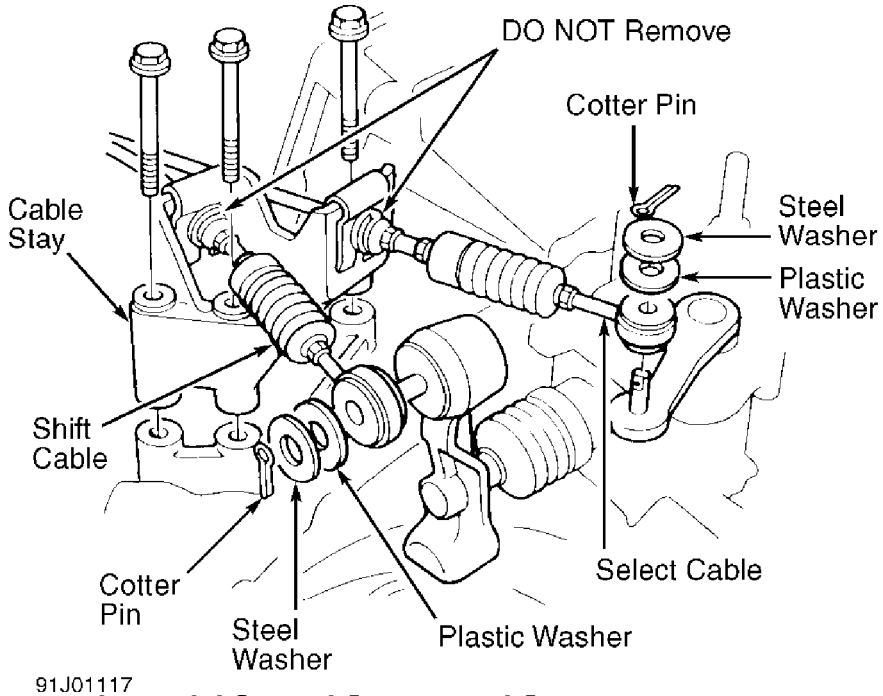

Fig. 2: Removing Shift Cable Assembly
Courtesy of American Honda Motor Co., Inc.

2) Disconnect electrical connector, and remove speed sensor, leaving hoses attached. Remove both front wheels. Remove undercarriage splash shield. Drain transaxle fluid. Remove clutch release cylinder, tubing and push rod. Remove clutch hose joint.

3) Remove clutch damper and support with wire. Remove center beam and header pipe. Separate left and right lower control arms from ball joints. Remove strut fork bolt. Pry drive shafts out of differential and intermediate shaft, and remove drive shafts. Lower bearing support, and remove intermediate shaft.

4) Remove right strut pinch bolt, and separate strut fork and strut damper. Remove right radius rod. Remove engine stiffener and clutch cover. Remove intake manifold bracket. Remove rear engine mount bracket stay and bracket. Remove transaxle housing mount bolt from engine side.

5) Place a transaxle jack under transaxle, and slightly raise transaxle to take weight off mounts. Remove transaxle mount, and loosen mount bracket bolts. Remove remaining transaxle housing mount bolts. Lower transaxle from engine.

Inspection

1) Check pressure plate diaphragm spring fingers for wear and unevenness on release bearing contact area. Check spring finger height using feeler gauge and Clutch Disc Aligner Assembly (07JAF-PM7011A, 07LAF-PT00110 and 07936-3710100).

2) Verify clearance between tool flange and finger is at least .02"(0.6 mm) for new pressure plate and at most .03" (0.8 mm) for existing pressure plate.

3) If necessary, install Ring Gear Holder Assembly (07924-PD20003) to hold flywheel stationary while pressure plate and clutch disc are being removed.

4) With pressure plate and clutch removed, inspect pressure plate surface for wear, cracks, burning and warpage. Maximum face warpage is .006" (.15 mm). Using straightedge and feeler gauge, measure clearance at several points.

5) Inspect clutch disc lining for slipping, excessive wear, burning and oil contamination. Measure disc thickness and rivet depth. Check for loose rubber torsion dampers. Replace disc if any dampers are loose. Check disc runout.

6) Inspect flywheel ring gear teeth for excessive wear and damage. Inspect flywheel surface for wear, burning and cracks. Check flywheel runout and flywheel pilot bearing.

Installation

1) Align flywheel dowels with dowel holes in clutch cover. Using clutch alignment tool and ring gear holder, install disc and pressure plate. Tighten bolts evenly in a crisscross pattern. Ensure 2 dowel pins are installed in clutch housing.

NOTE: New spring clips must be used on both axle shafts. Slide axles in until spring clips engage differential.

2) Clean release bearing sliding surface. Apply molybdenum grease to release bearing sliding surface. Apply a light amount of grease to input shaft splines. DO NOT allow grease or dirt on clutch disc or pressure plate surfaces. To complete installation, reverse removal procedure. Refill fluid to proper level. Adjust clutch pedal height and free play.

CLUTCH MASTER CYLINDER

Removal & Installation

Pry out cotter pin, and pull pedal pin out of yoke. Disconnect and plug hydraulic line. Remove nuts and bolts attaching master cylinder to firewall. To install, reverse removal procedure. Refill master cylinder, and bleed air from system.

CLUTCH RELEASE CYLINDER

Removal & Installation

Disconnect clutch pipe from release cylinder. Remove release cylinder from transaxle clutch housing. To install, reverse removal procedure. Refill release cylinder, and bleed air from system.

OVERHAUL

NOTE: Manufacturer recommends replacement of faulty clutch master and release cylinders and does not provide overhaul procedures.

CLUTCH SPECIFICATIONS

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Application	Range In. (mm)	Service Limit In. (mm)
Disc Thickness	.33-.36 (8.4-9.1)	.24 (6.1)
Flywheel Runout	.002 (.05)	.006 (.15)
Rivet Depth	.051 (1.30)	.008 (.20)

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS TABLE

Application	Ft. lbs. (N.m)

Battery Base Mounting Bolts	16 (22)
Flywheel Housing-To-Engine Bolts	47 (65)
Flywheel-To-Crankshaft Bolt	77 (105)
Front Wheel Lug Nuts	80 (109)
Intake Manifold Bracket Bolts	16 (22)
Intermediate Shaft Support Bolt	28 (39)
Master Cylinder Mounting Nuts	10 (14)
Pedal Adjuster Lock Nut "C"	13 (18)
Pressure Plate-To-Flywheel Bolts	19 (26)
Rear Mount-To-Transmission Bolt	28 (39)
Release Cylinder-To-Housing	16 (22)
Speed Sensor Mounting Bolts	14 (19)
Starter Mounting Bolts	55 (75)
	INCH Lbs. (N.m)
Pedal Adjuster Lock Nut "A"	10 (89)
Pedal Adjuster Lock Nut "B"	10 (89)

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