



a Siebe company

Installation of the Barber-Colman Linear Governor, DYNC-10200, on Honda EX 5500 and EX 6500. The actuator bracket is installed on the top two intake manifold mounting screws. The throttle linkage and mechanical governor are removed and discarded. The magnetic pickup is installed on the lower right side of the flywheel.

Read all instructions and review the layout drawing before attempting this installation.

A. Installation Procedure

- 1) Remove air cleaner assembly for easier access to the governor and carburetor linkage.
- 2) Remove & discard the mechanical governor and linkage.

B. Installing the Actuator Bracket

- 1) Refer to the layout drawing and install bracket as follows.
- 2) Remove and discard the top two 8m nuts which fastens the intake manifold to the head. Replace these nuts with two 8m spacers, Item 4.
- 3) Attach the actuator bracket, Item 3, to these spacers with two 8m cap screws and lock washers, Items 5 and 6.
- 4) Install the actuator, Item 1, to the mounting bracket, Item 3, with four 6m screws and lock nuts, Items 7 and 8.

C. Installing Throttle Linkage

- 1) The throttle lever, Item 11, is installed by sandwiching the plastic triangle lever on the top of the carburetor shaft between the throttle lever, Item 11, and the lever retainer, Item 12. There are three #4 screws, Item 13, which fastens this assembly together.
- 2) Install one 6m nut, Item 10, and a linkage clevis, Item 9, on to the end of the actuator shaft.
- 3) Install one rod clip, Item 15, into the hole in the linkage clevis and one into the hole in the top of the throttle linkage.
- 4) Insert the linkage rod, Item 16, into the rod clips.
- 5) Adjust the length of the throttle linkage by changing the distance of the linkage clevis on to the actuator shaft. The linkage is to be adjusted so the carburetor butterfly is closed when the actuator is de-energized. When this is insured, tighten the 6m jam nut into the linkage clevis.

D. Installing the Magnetic Pickup

- 1) Remove the sheet metal from the front of the generator housing. Remove the plastic flywheel housing.
- 2) Install the magnetic pickup bracket, Item 17, on to the lower right hand side of the engine block. The tab on the bracket is placed into an existing hole in the block and fastened to the block by an existing screw.

- 3) Align a tooth on the ring gear to the center of the magnetic pickup hole. Screw the magnetic pickup, Item 18, in until it bottoms onto the tooth. Back the pickup out 1/2 turn. This will achieve proper magnetic pickup clearance.

- 4) Cut a small section out of the side of the flywheel housing where the magnetic pickup inhabits and reinstall the flywheel housing and sheet metal.

E. Controller Wiring

- 1) The controller can be mounted on the inside of the generator housing.
- 2) The leads from the controller should either be wired to a terminal strip or soldered to the appropriate external leads, such as the magnetic pickup leads, D.C. power leads and actuator leads.
- 3) D.C. power leads and actuator leads should be 14 ga. twisted pairs.
- 4) It is good practice to run D.C. supply leads to where the large battery cables come to the engine and wire the positive lead to a normally open contact of a 10 amp relay.
- 5) The coil of the relay should be wired to the engine fault for automatic fault shut down. This method of wiring will allow shut down of the fuel system because the actuator internal spring holds the actuator core in the "off" or "retracted" position when electrically de-energized.
- 6) Observe that on the controller nameplate and on the attached wiring diagram, the controller leads are identified by color code.
- 7) The bare shield wire of the magnetic pickup leads should be connected to the black negative power lead to the controller.

F. Calibration

- 1) When the installation has been completed, set the controller gain for 20%. Start the engine and adjust the speed setting on the controller for desired speed.
- 2) Last, turn the gain adjustment clockwise until the governor is unstable, then slowly turn counter clockwise until governor operation is stable.

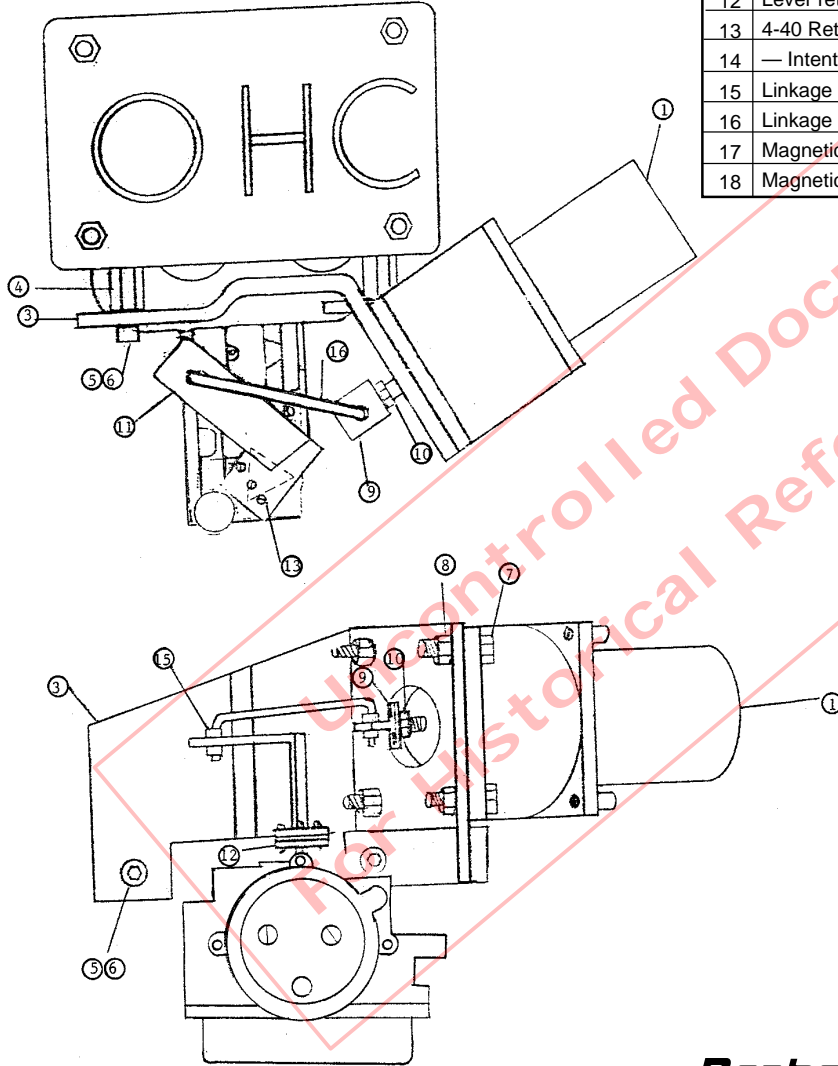
Parts List

A. Table 1. Governor Assembly

Specify voltage when ordering Items 1 and 2

Item	Description	Barber-Colman Part Number	Qty.
1	Governor actuator	DYNC-10200	1
2	Controller	DYN1-10726 or DYN1-10736	1

Layout Drawing



NOTE

Barber-Colman believes that all information provided herein is correct and reliable and reserves the right to update at any time. Barber-Colman does not assume any responsibility for its use unless otherwise expressly undertaken.

CAUTION

As a safety measure, the engine should be equipped with an independent overspeed shutdown device in the event of failure which may render the governor inoperative.

B. Table 2. Installation Kit

B-C Part Number DYNK-10295

Item	Description	Barber-Colman Part Number	Qty.
3	Actuator mounting bracket	DYNK-74-13	1
4	8m 1.25 Hex spacers	DYNK-74-20	2
5	Hex hd cap screws 8m - 20 - 1.25	S3-51	2
6	8m Lock washers	W1-3	2
7	Actuator mounting screws 6m x 20	S4-4	4
8	6m Lock nuts	N1-21	4
9	Linkage clevis	DYNK-74-18	1
10	6m Hex jam nut	N1-1	1
11	Throttle lever assembly	DYNK-74-16	1
12	Lever retainer	DYNK-74-17	1
13	4-40 Retainer screws (round hd. 4-40 x 1/4" long)	BYRF-3165	3
14	— Intentionally blank —		
15	Linkage clips	DYNK-74-22	2
16	Linkage rod	DYNK-74-19	1
17	Magnetic pickup bracket	DYNK-74-21	1
18	Magnetic pickup	DYNT-17100	1

1. The throttle linkage is installed to the carburetor shaft by sandwiching the triangle shaped throttle lever between the throttle linkage — Item 11, and the lever retainer — Item 12.
2. The throttle linkage is adjusted by changing the length of the linkage clevis — Item 9, on the actuator shaft. The linkage has to be adjusted so the carburetor is closed when the actuator is de-energized.
3. The magnetic pickup is installed on the lower right hand side of the engine. The magnetic pickup retainer is fastened to the engine block by an existing screw.
4. Adjust the magnetic pickup by aligning a tooth into the center of the pickup hole. Screw the pickup in until it bottoms on to the top of the tooth. Turn the pickup out 1/2 turn. This will give the proper clearance between the tip of the pickup to the teeth on the ring gear.

Barber-Colman Company

AEROSPACE & POWER CONTROLS DIVISION DYNA Product Group

1354 Clifford Avenue
P.O. Box 2940
Loves Park, IL U.S.A. 61132-2940

Phone: (815) 637-3000
Fax: (815) 877-0150

In Europe contact: Barber-Colman GmbH
Am neuen Rheinhafen 4, D-6720 Speyer, West Germany
Tel: 06232-1203, Fax: 06232-12155, Telex: 467 627

In Japan contact: Ranco Japan Ltd.
Shiozaki Bldg. 7-1, 2-chome, Hirakawa-Cho, Chiyoda-Ku
Tokyo 102, Japan
Tel: 3261-4293, Fax: 3264-4691, Telex: 0232-2087