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Installation of the Barber-Colman 8000 Electric Governor on the Cat 3116 & 3114-G Drive Diesel engine. The fuel pump/mechanical governor is series 7C6562. The engine flywheel has 134 teeth. Numbered parts on the layout drawing below are Item numbers in the parts list. Calibrate the DYN1-10654 controller as described in document F-22171-4.

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

I. Installation Instructions

1. Remove the manual speed setting Boden cable.
2. Remove the fuel lever torsional spring located in the round cavity at the fuel lever pivot shaft.
3. On G-drive engines the fuel lever rotation limit screws should already be adjusted. If not, proceed as follows:
 - a) With the engine operating and warm, hold the fuel lever against the idle screw. Adjust the screw until the engine is operating at close to 1750 RPM.
 - b) Carefully move the fuel lever against the max fuel screw. Adjust the screw until the engine operates at close to 1850 RPM.

— NOTE —

The electric governor in this application is being used to de-droop the mechanical governor for isochronous operation 60Hz, regardless of load.

4. Observe that Item 11 is an add on lever. Screw* is an existing screw. Install Item 11 as shown.
5. Install the bracket — Item 3, and support bracket — Item 6 first.
6. Install the actuator — Item 1, on the bracket. Observe that one hole in the bracket is threaded for 5/16 - 24 thread.
7. Refer to the upper view. Install the levers, rod end bearings and linkage.
8. The speed signal for the governor electronics comes from where the existing magnetic pickup leads are connected in the panel. Use two wire foil shielded cable.
9. Item 6 is an outboard brace, added after original issue. Be sure the bracket screws — Item 4, are tight.

Recommended Power Lead Wiring:

1. Break plus power lead with N/O, 10 amp relay contact. Panel mount relay. Use Item 23 wire. D.C. source where large battery cables come to engine.
2. Connect coil of relay to panel fault circuit.

II. 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-11025-300	1
2	Controller	DYN1-10654	1

Controller, Item 2, may be different part no. for some applications.

B. Table 2. Installation Kit

B-C Part Number DYNK-10269

Item	Description	Barber-Colman Part Number	Qty.
3	Actuator mounting bracket	DYNK-68-43	1
4	Actuator bracket screws M10 x 1.5 x 20mm	S3-54	2
5	Lock Washers — Metric	W1-4	2
6	Bracket Brace (Outboard)	DYNK-68-47	1
6a	Bracket Support Brace (Inboard)	DYNK-68-44	1
7	Upper brace screw 5/16 - 24 x 1" Hex	BYRF-3112	1
8	Lock washer 5/16 (Use with Item 7)	CYRD-559	5
9	Lower brace screw M8 x 1.25 x 20 mm	S3-51	1
10	Lock washer - Metric	W1-3	1
11	Add on fuel lever* (Use Items 12 & 13)	DYNK-68-45	1
12	Screw 1/4 - 28 x 5/8" Hex	BYRF-1343	1
13	Nut - Pinch - 1/4 - 28 (Use on Item 12)	DYRF-532	3
14	— Intentionally Blank —		
15	— Intentionally Blank —		
16	Actuator bracket screws 5/16 - 24 x 2-1/4 Hex	BYRF-3139	4
17	Rod end bearings 1/4 - 28 Thread	DYNZ-47-1	2
18	Rod end bearing screws 1/4 - 28 x 1" Hex	BYRF-1346	2
19	Threaded rod 1/4 - 28 x 2-3/8" Long	GYRF-42-15	1
20	Jam nuts 1/4 - 28 (Use on Item 19)	DYRF-110	2
21	Actuator lever - Radius 1.312"	DYNC-182-6	1
22	2 Wire foil shielded cable **	47-012	3 ft.

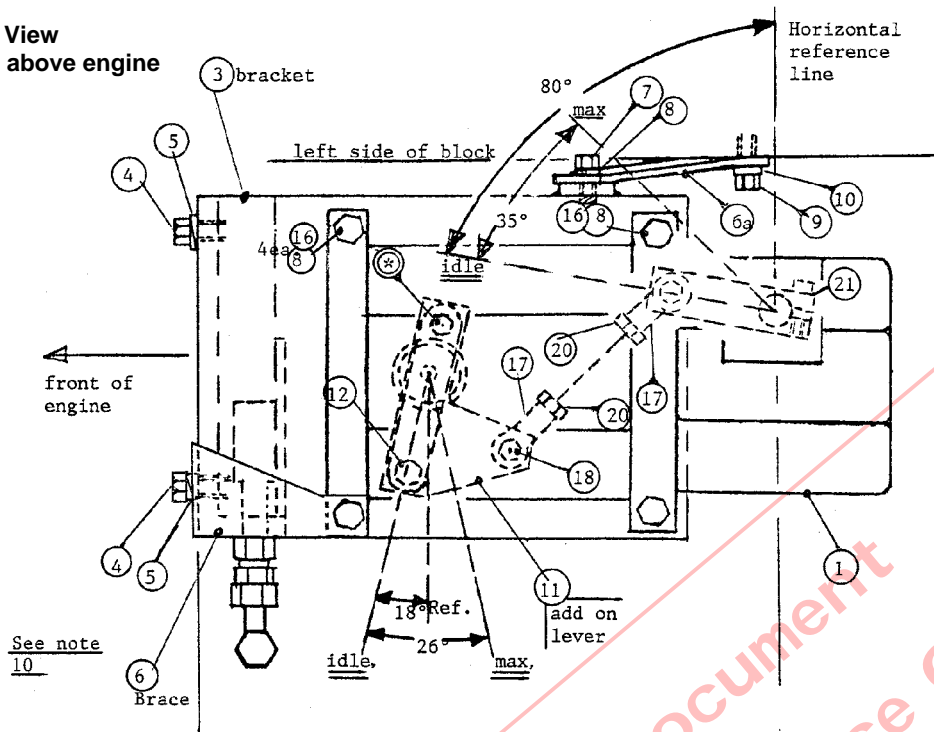
**Make use of existing magnetic pickup. Connect Item 22 wire above in control panel to terminals having pickup leads. Connect bare drain shield wire only at one end terminal 10 on Item 2 controller.

B. Table 3. Optional Parts

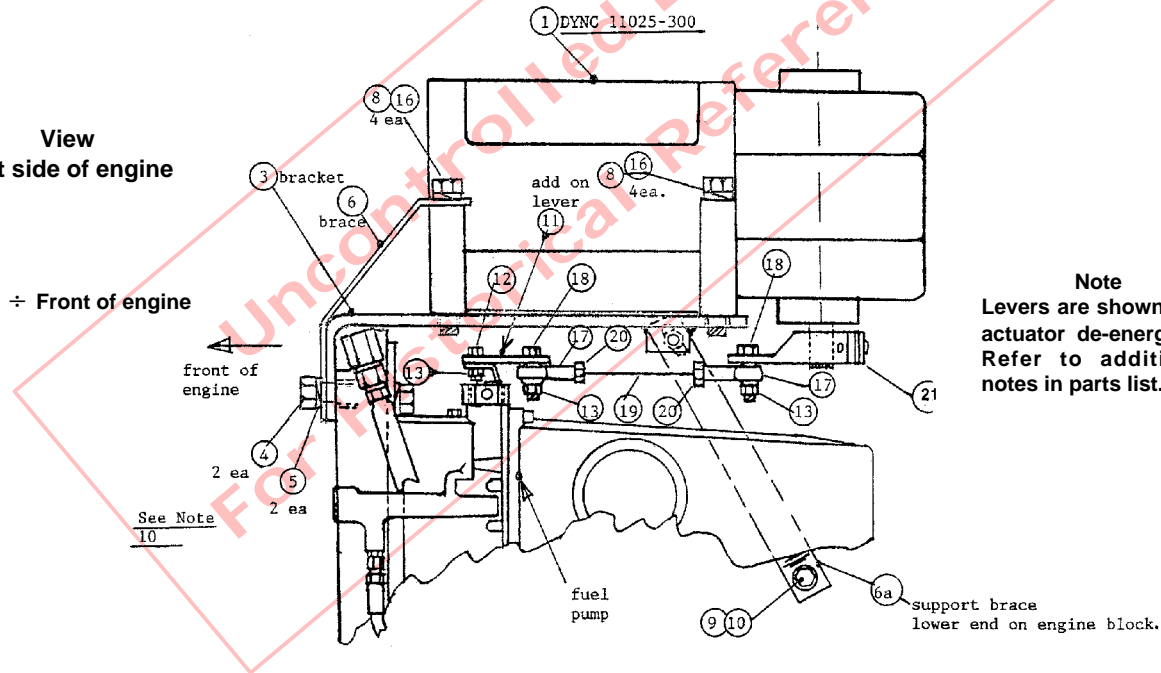
Item	Description	Barber-Colman Part Number	Qty.
23	Actuator & power leads	DYNZ-70-4	12 ft.
24	5K 10 Turn remote speed pot	DYNS-10000	1
25	3 Wire foil shielded cable	E26-22	specify length
26	Magnetic pickup	DYNT-10100	1
27	Power relay (12 VDC coil/10 amp contacts)	E16-118	1
28	Relay socket	P100-1	1

III. Layout Drawings

View
Left side above engine



View
Left side of engine



Note
Levers are shown with
actuator de-energized.
Refer to additional
notes in parts list.

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.

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.

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