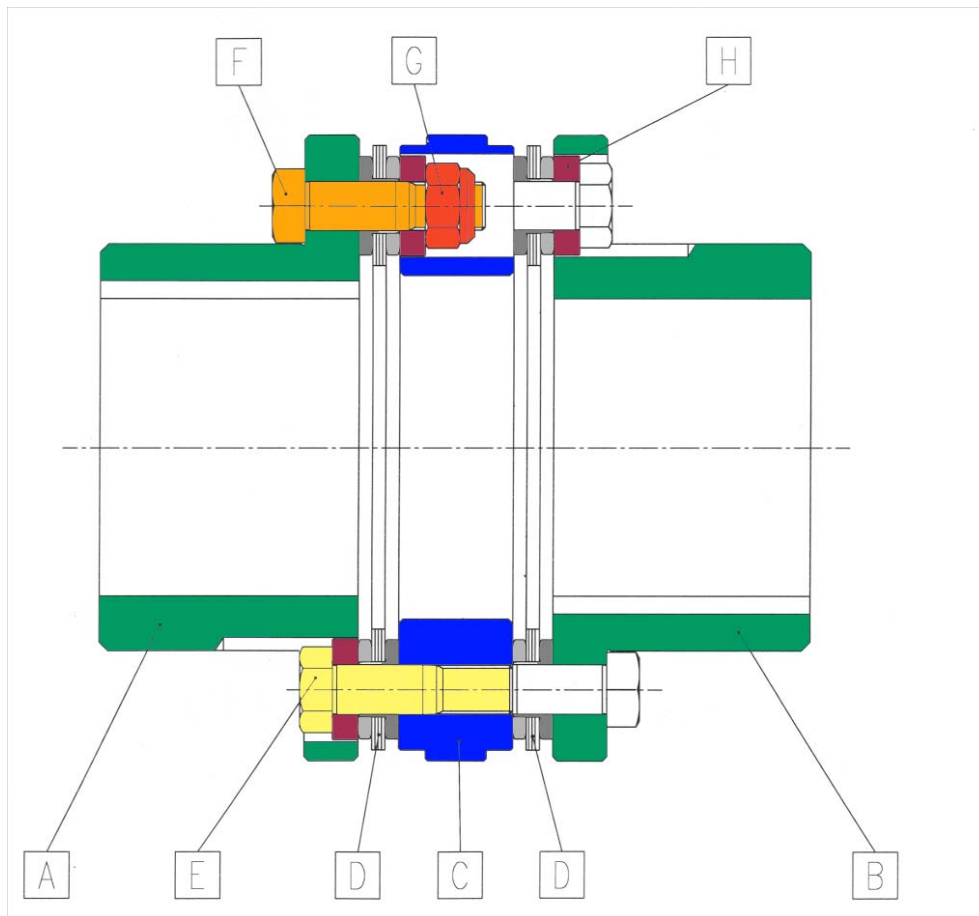


ED-HVII TYPE METAL MEMBRANE COUPLING

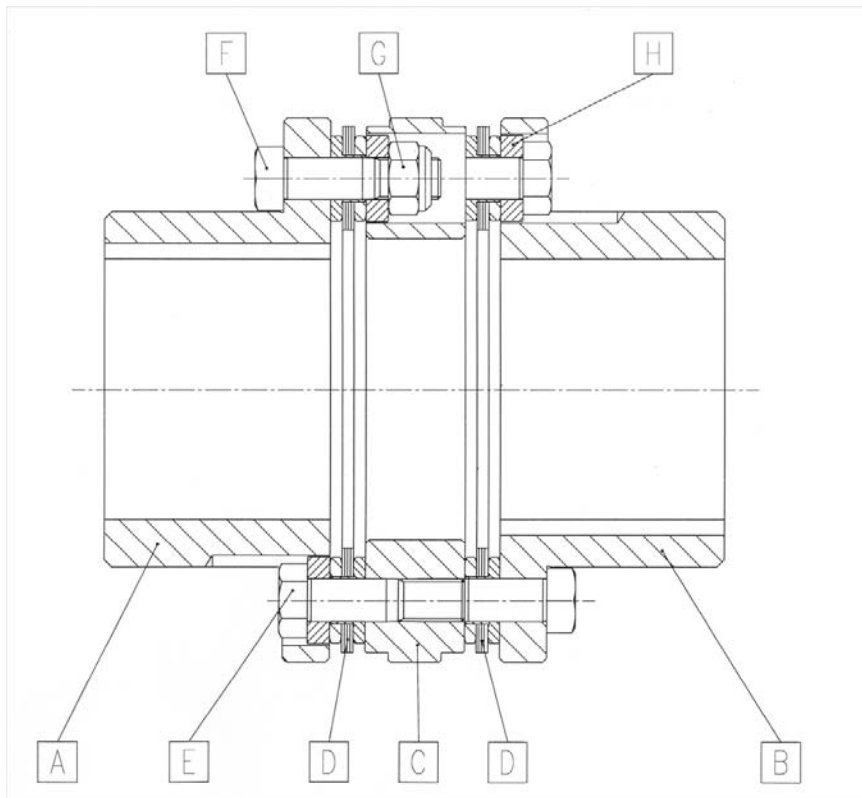
Installation and Assembly Instructions



Version 03/03 – STND

2 Wilkinson Rd., Love Lane Industrial Estate, Cirencester, Glos., GL7 1YT UK
Tel. +44 (01285) 640333 – Fax. +44 (01285) 659476

USA +1 815 229 3190 ● Japan +81 3 3449 9621 ● Germany +49 5263 5949 69
Australia +61 3 9532 0901 ● Italy +39 0292 1700 471
Registered Number 4380334 England



ED-HVII COUPLING

The following instructions apply to a standard ED-HVII coupling. The actual coupling supplied may vary depending on the customer's requirements and specifications. Where supplied, these instructions should be read in conjunction with the coupling general arrangement drawing.

SELECTION VERIFICATION

The user is responsible for ensuring that the coupling ordered will meet the duty requirements and that the duty has not changed from the time that the coupling was originally selected. Autogard can supply the duty under which the coupling was originally selected.

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INSTALLATION

Preparation

The coupling should be unpacked and examined for any signs of damage, which may have occurred during transit. Verify that all the parts have been properly supplied as per the order.

Before installing the coupling, ensure that the rotating equipment is isolated so that installation can be carried out in a safe manner.

Check that the coupling bores are as per the original order. Care should be taken to ensure that the bores are free from burrs. Special care should be paid to the bolt threads, the flange holes and the spacer bolts to ensure that they have not been damaged in transit.

The Autoflex ED-HVII is typically fitted with a straight parallel bore and keyway for a light interference fit. Refer to the order for specifics relating to the actual bore and keyway specified.

Autogard factory pre-assembles the membrane pack to the driving and driven hubs. These membrane packs should not be removed in the assembly processes.

For standard interference bores, the coupling hubs should be heated to 80 degrees C in an oil bath or an oven. Do not use spot heat or exceed 100 degrees C as this may cause flange distortion. Fit the hubs onto the shafts with the hub face flush with the shaft end or as specified on the General Arrangement Drawing. When clearance fit hubs are supplied, slide the hub onto the shaft and tighten the setscrews.

Where Taper Bored and/or Hydraulic Mounting hubs are supplied, consult Autogard for the appropriate installation instructions.

NOTE: Care must be taken to ensure that the coupling hubs are properly supported during installation to ensure that they do not slip.

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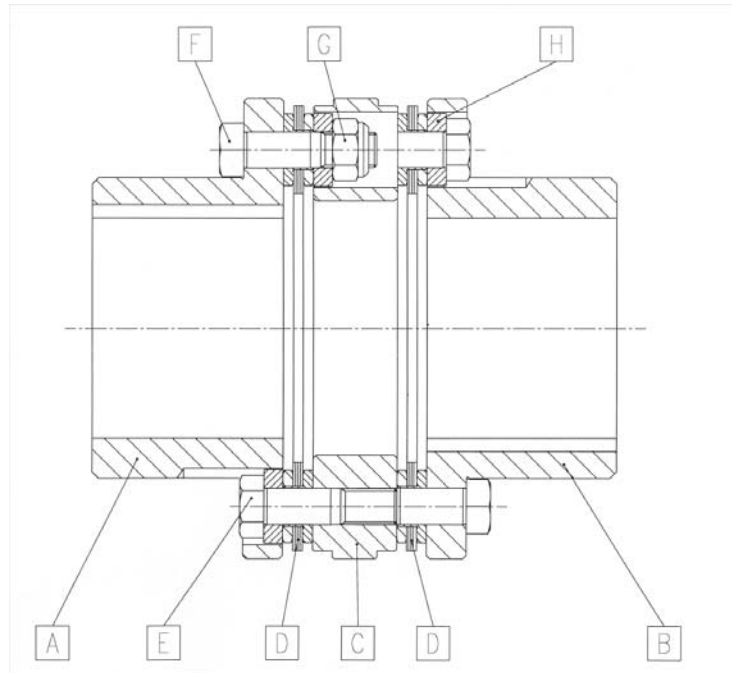
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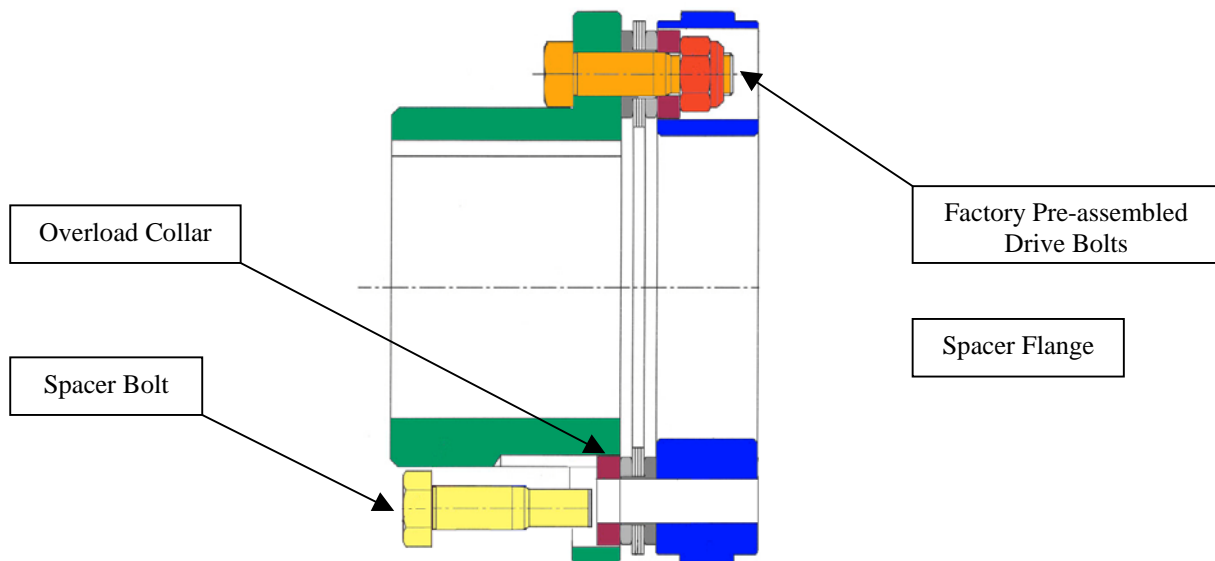
Assembly



A	Driving Hub	B	Driven Hub
C	Spacer	D	Membrane Pack Assembly
E	Spacer Bolt (Short)	F	Drive Bolts (Long)
G	Lock Nuts	H	Over Load Collars

Sizes 15 – 150 : Membrane Pack Assembly is made up of one small washer, one overload collar and a set of membranes

Sizes 330 – 480: Membrane Pack is factory preassembled.



Prior to assembling the membrane unit, check to make sure all the parts are available and that they have not been damaged in transit or storage.



Mount the driven equipment to the base plate. The hub and factory assembled membrane pack should have been installed as noted earlier. Align the spacer flange to the membrane pack such that the overload collar fits into the clearance holes as noted above. Install the spacer bolts (short bolts) through the overload collar and membrane pack and tighten into the spacer flange. Tighten as per the torques supplied in table 1.

Slide the motor onto the base plate. The driving hub and factory assembled membrane pack should have been installed as noted earlier. Align the spacer flange such that the clearance holes fit into the factory assembled overload collars. Position the motor such that the shaft separation, the distance between the hub faces is as per the order or as per the general arrangement drawing if supplied.

Align the centre line of the driving and driven shafts using the best available methods. Autogard recommends the use of Laser Alignment where available. The better the alignment the lower the resultant loads will be transmitted onto the bearings of the driving and driven equipment. Autogard recommends that the misalignment be set at no more than 10% of the catalogue ratings. This will allow for misalignment, which occurs due to foundation settling, thermal growth etc.

The coupling alignment should be checked periodically to ensure that alignment deterioration is properly compensated

Once the equipment has been properly aligned and mounted to the base plate, install the remaining spacer bolts (short bolts) through the overload collar and the factory assembled membrane pack and tighten to the appropriate torque as outlined in table 1.

Drive Bolt Tightening Torque

Coupling Size	Bolt Size (mm)	Bolt Tightening Torque (Dry) (ft-lbs)	Bolt Tightening Torque (Dry) (Nm)
ED 15 HVII	M6	8	11
ED 35 HVII	M8	18	24
ED 70 HVII	M8	18	24
ED 150 HVII	M8	18	24
ED 330 HVII	M16	131	177
ED 480 HVII	M18	177	240

Table 1

Once the coupling has been installed as noted above, slowly rotate the machinery to ensure that everything moves freely.

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IMPORTANT INSTRUCTIONS BEFORE START-UP:

- Coupling guards must be provided in accordance with local and national regulations.
- Make sure all fasteners have been properly installed and tightened as per the supplied tables or the General Arrangement Draws.
- If possible, re-check the coupling alignment after the driver and driven foundation bolts have been tightened.
- Consult Autogard Engineering for clarification of any of the points outlined in this installation guide.
- Only authorised Autogard replacement parts are to be used.

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