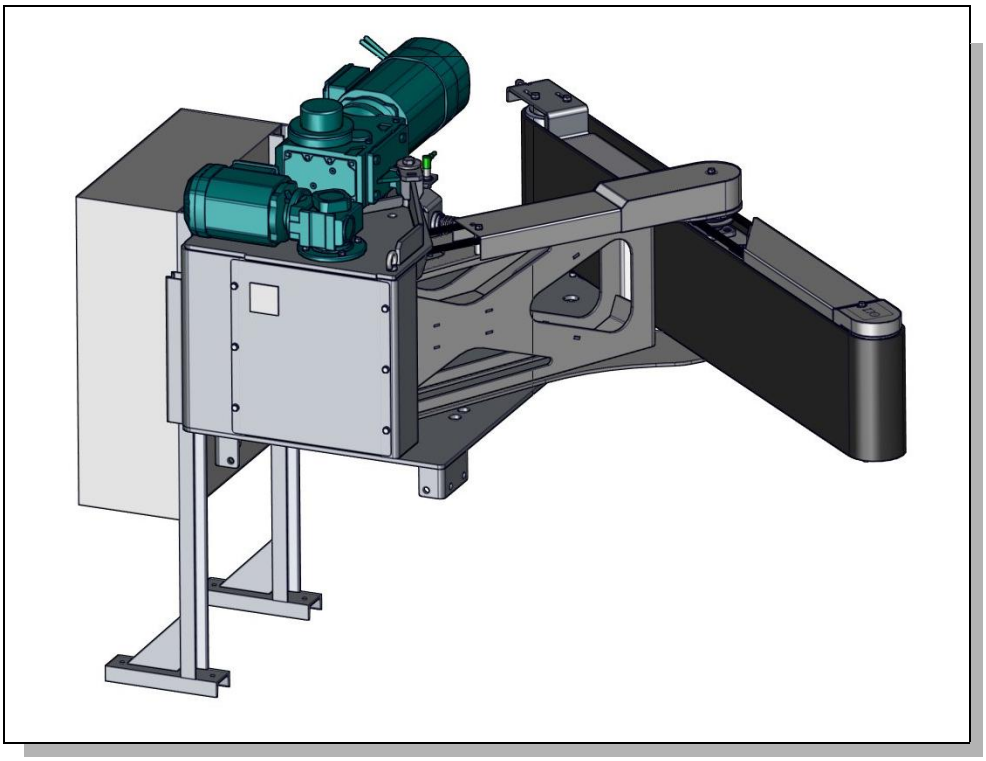
Assembly instruction

ASSEMBLY MANUAL HIGH CAPACITY DIVERTER II

Markcode	**HCD**



Document Nr	A_DOC068456
Language	EN
Revision	F

Always use last revision!

General information

Used symbols

DANGER

Risk of serious injury or threat of death

WARNING

Risk of personal injury

CAUTION

Risk of damage to equipment

NOTE

Information that requires attention

- ⇨ Input
- ⇦ Output
- Special tools
- Related documents

Product identification

Nr	Description
N55302-024-00001	Assembly Divert Blade Left
N55302-024-00002	Assembly Divert Blade Right
N55302-024-00003	EU Divert Blade Left
N55302-024-00004	EU Divert Blade Right
N55302-002-00001	Reaction Beam Left
N55302-016-00001	Reaction Beam Right
N55302-000	HCD Left /
N55302-017	HCD Right

Related documents

Document Nr	Description
A_DOC069815	Checklist High Capacity Diverter

Special tools

Item Nr	Description
	Jack
N55302-317	Shaft divert blade

Table of contents

Safety information

WARNING The High Capacity Divert (HCD) is designed to handle baggage and / or packages. Handling persons or creatures with the HCD is strictly prohibited.

WARNING Installation contractor or installation engineers are responsible for safety and should work according the local safety requirements/regulations.

WARNING Before test running be sure that nobody is present in the surrounding area of the HCD!

WARNING Before test running, check if the HCD is fixed well.

WARNING When glue or other chemical liquid is used, read the instructions of the supplier. Use protective clothes, gloves and safety glasses when indicated.

Procedure Assemble Divert Blade and EU Divert Blade

NOTE Secure all threaded connections with Loctite 243.

NOTE Torque for all M8 bolts = 27Nm

NOTE Coat all non-preserved parts with a rust protection lubricant.

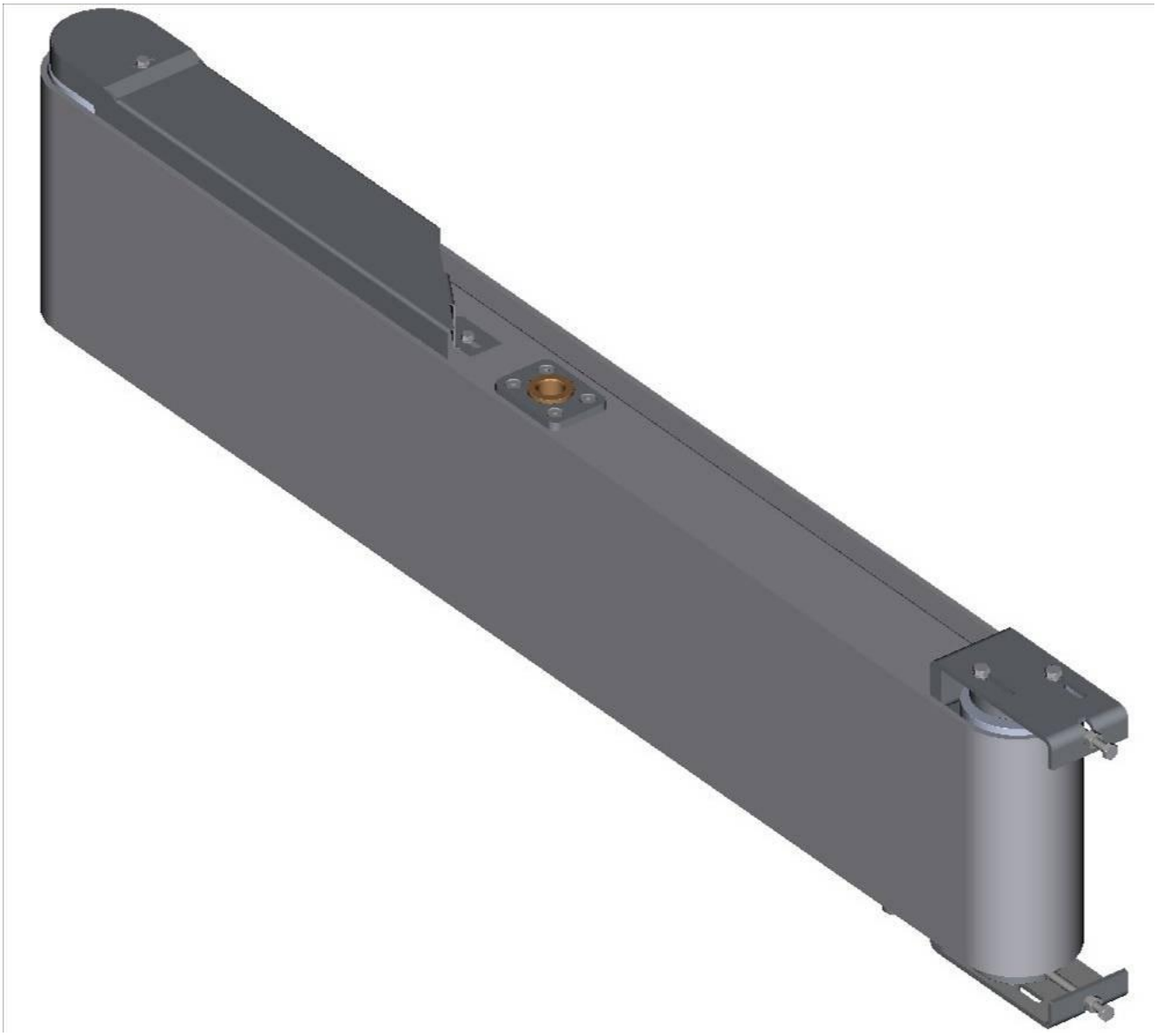
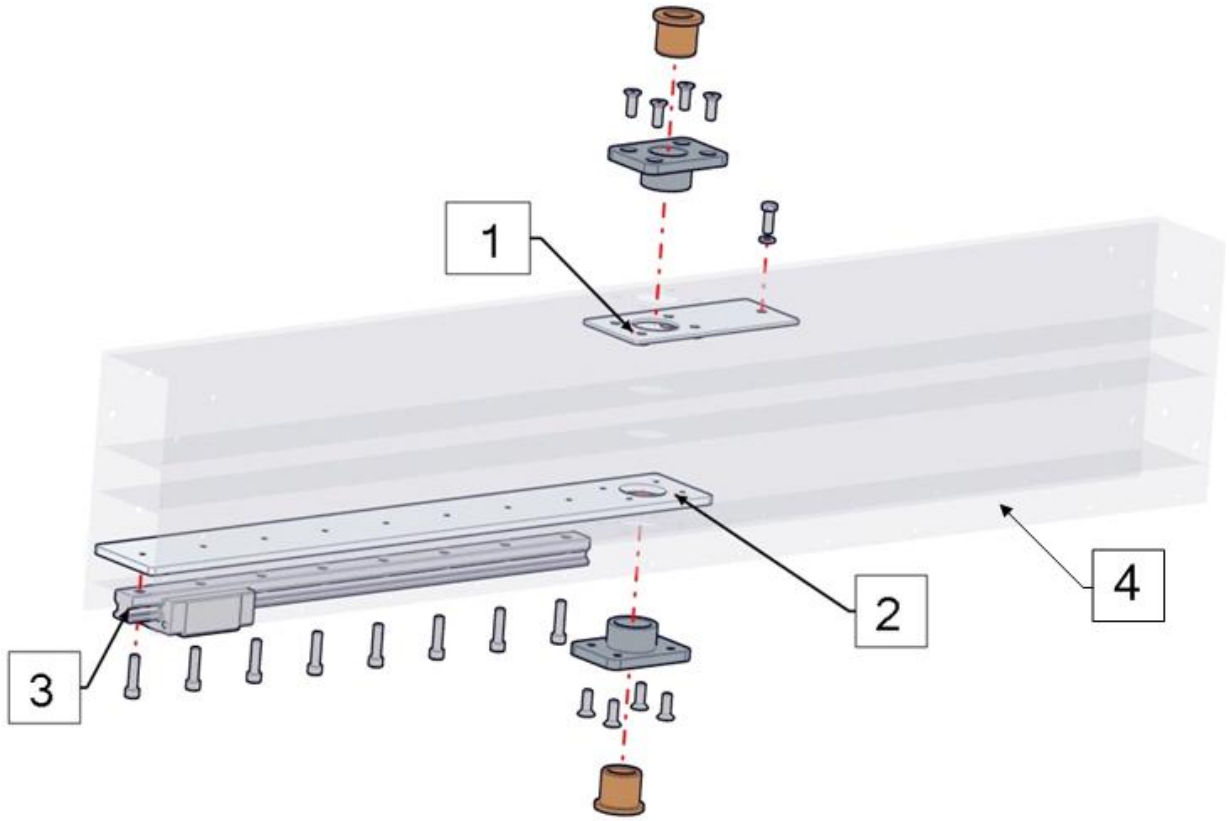


Figure 1 Completed Divert Blade Left (N55302-006)



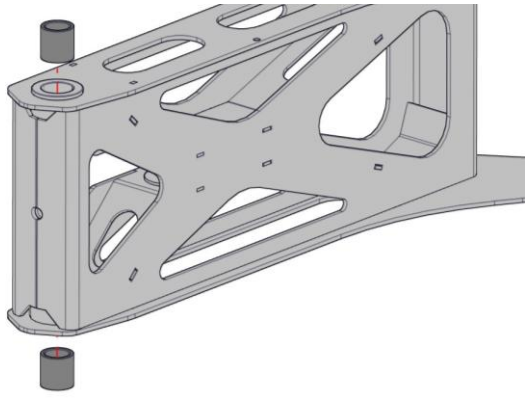
⇨ N06520-00001	(2x)	Bushing Oil Free Misumi #MPFZ30-40
⇨ N55302-664	(2x)	Flange
⇨ 002412-00825	(16x)	Screw HS CS FT M8x25
⇨ 002311-08025	(1x)	Bolt HH FT M8x25
⇨ N55302-367	(1x)	Welding mounting plate shaft connection (top)
⇨ N55302-705	(1x)	Aluminium extrusion
⇨ N55302-702	(1x)	Welding mounting plate shaft connection small (bottom)
⇨ N04936-00602	(1x)	Guide Rail +carrier MXD30 C1 R600 T1 HS2 (IKO)
⇨ 002419-08035	(8x)	Screw HS M8x35

Step 1 Mount the top and bottom shaft and linear guiding system

- Insert top and bottom mounting plates (1 and 2) and guide rail (3) as shown in the figure above

NOTE Make sure that bushings are in line with each other. Check by inserting shaft N55302-317 and ensure that it rotates freely.

NOTE Thoroughly clean all holes that secure the rail on the backing plate [2] on the extrusion [4] with Loctite cleaner.

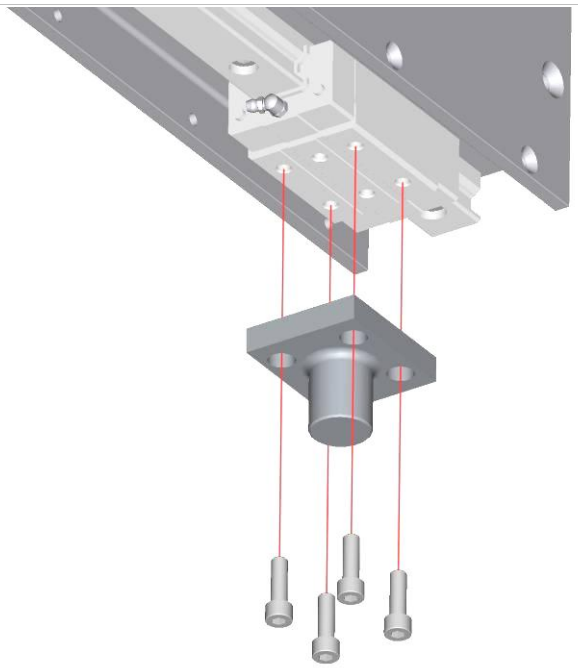


⇨ N04935-04050	(2x)	Bushing type MPBZ 40-50 (supplier Misumi)

CAUTION Gently tap bushing into place using a synthetic hammer.

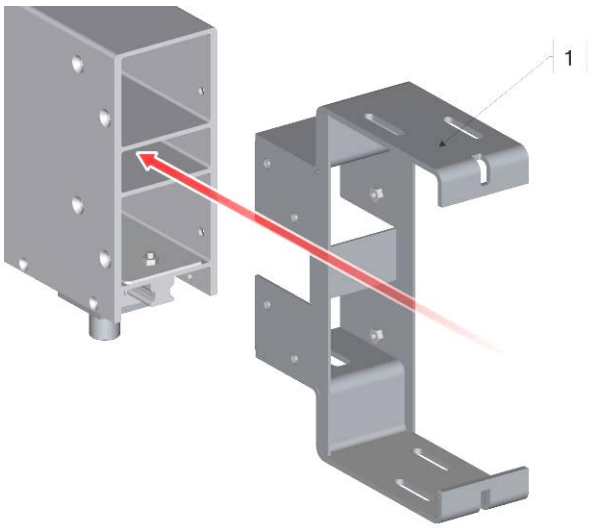
Step 2 Mount brass bushings.

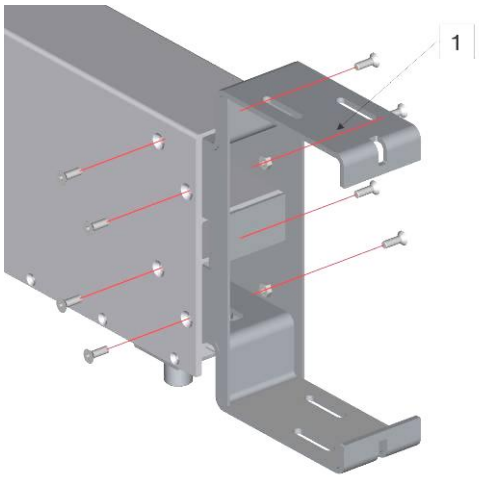
NOTE Make sure that both bushings are in line and have the right tolerances.



- ⇨ N55302-527 (1) Guiding assy divert blade
- ⇨ 002419-08016 (4x) Screw HS M8x16

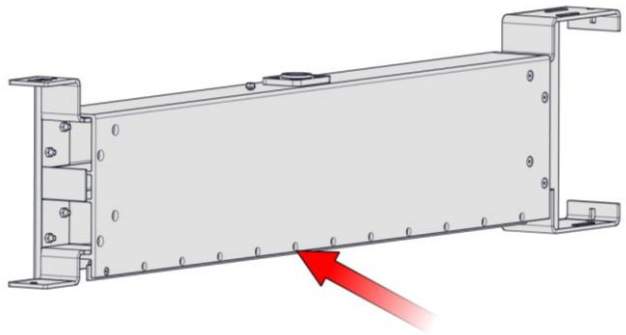
Step 3 Mount the guiding assy divert blade





- ⇨ N55302-310 (1x) Assy Driving (Assy driving pulley)
- ⇨ N55302-315 (1x) Assy ETU backside (Assy divert blade HCD)
- ⇨ N55302-322 Assy ETU front side (Assy divert blade HCD)
- ⇨ 002412-00825 (16x) Screw HS Countersunk FT M 8x 25

Step 4 Attach the ETUs on front and back



Step 5 Clean all holes that secure the rail on the backing plate thoroughly with Loctite (see arrow).

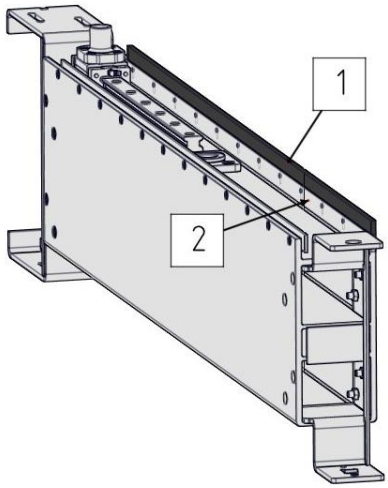


Figure 2 Right hand version

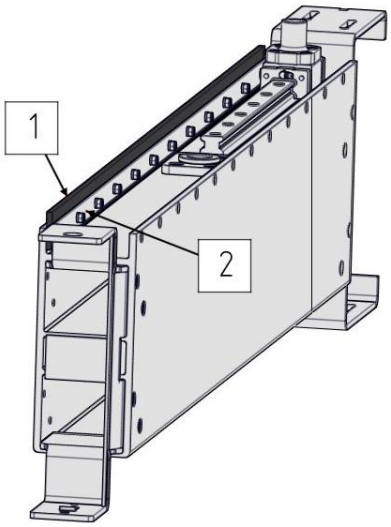


Figure 3 Left hand version

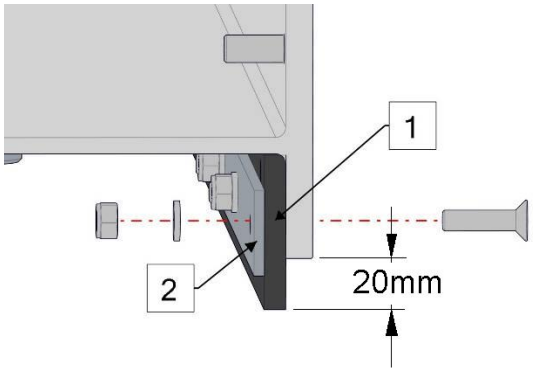
⇨ N55302-689	(1x)	Rubber sweep
⇨ N55302-647	(2x)	Bracket rubber sweep
⇨ 002412-00625	(12x)	Hex. socket countersunk head screw M6x25
⇨ 002371-56007	(12x)	Nut Hex Lock nyloc M6
⇨ 002764-00006	(12x)	Washer Lock Spring M6

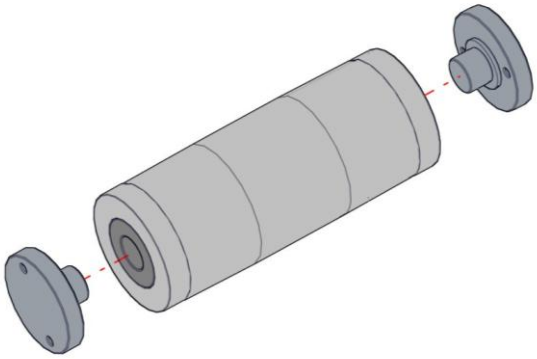
Step 6 Attach the rubber sweep

Rubber sweep: #1 in figure

Bracket rubber sweep #2 in figure

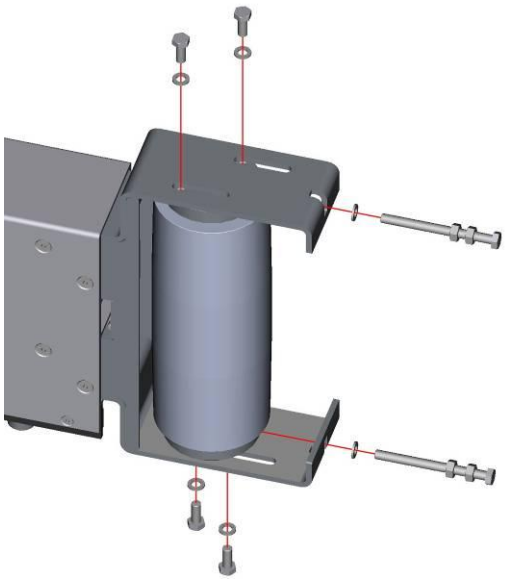
NOTE Torque M6 bolt = 2Nm





- ⇨ N55302-318 (1x) Assy drive pulley
- ⇨ N55302-528 (2x) Mounting Shaft (Drive pulley)

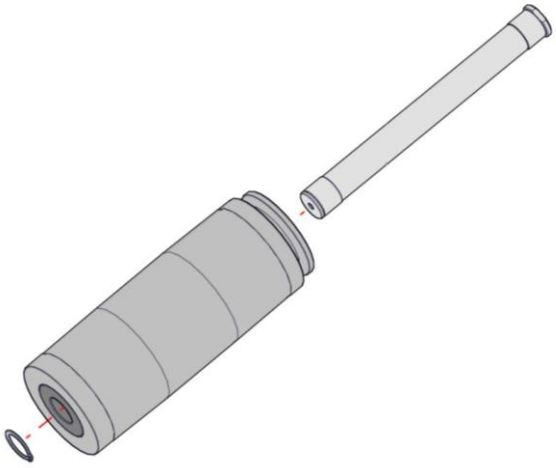
Step 7 Mount the driven pulley divert blade



- ⇨ N55302-008 (1x) Drive pulley assy
- ⇨ 002311-10025 (4x) Hex. head bolt M10x25
- ⇨ 002311-10100 (2x) Hex. head bolt M10x100
- ⇨ 002764-00010 (4x) Spring lock washer M10
- ⇨ 002370-88010 (4x) Hex. nut M10
- ⇨ (6x) Wide washer M10

Step 8 Mount ETU

NOTE Don't tighten bolts yet.



- ⇨ N55302-310 (1x) Driving pulley assy
- ⇨ N55302-576 (1x) Shaft pulley
- ⇨ 002746-00035(1x) Ring Ret Shaft A35, Din471 CK75

Step 9 Mount driving pulley

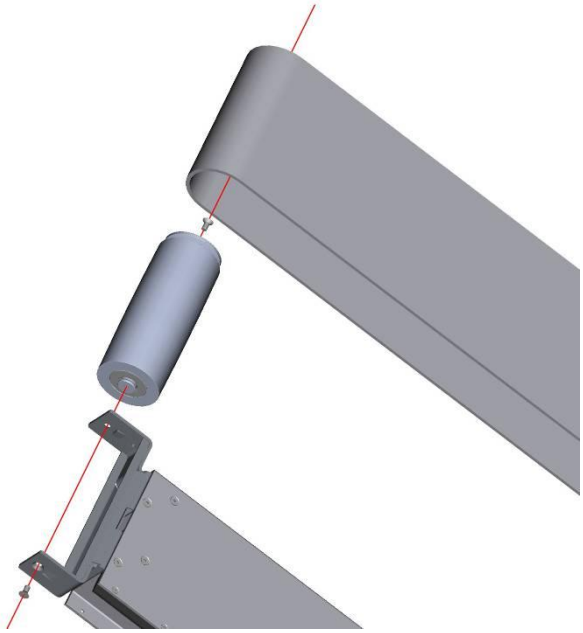


Figure 4 Turning drive pulley into the frame

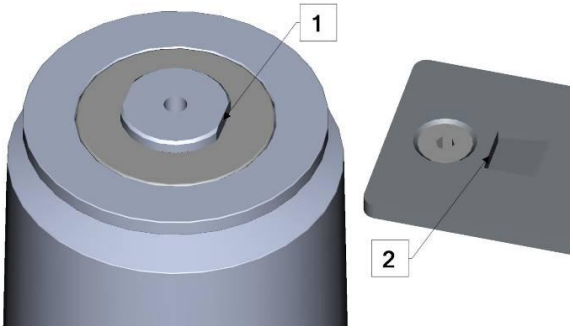


Figure 5 Pulley notch

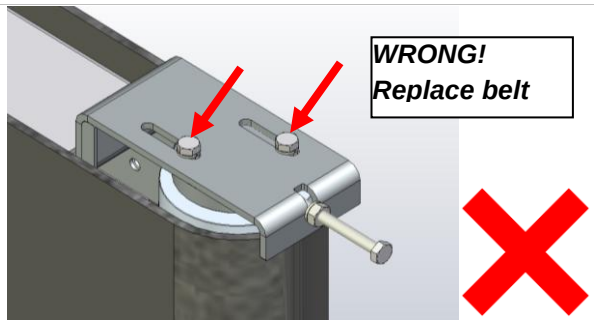
- ⇨ N55302-007 Driving pulley assy
- ⇨ N55302-724 Belt PHR2-90MF RTX BB-GP Art. 908214 (siegling)
- ⇨ 002421-10010 (2x) Hex. socket countersunk head screw . M10x25, stainless steel (A2)

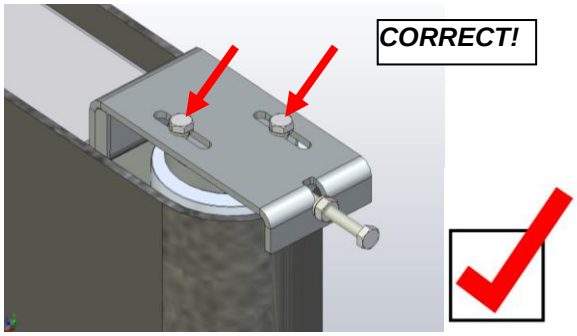
Step 10 Mount belt and drive pulley

NOTE Make sure flat side of shaft (1) is correctly aligned with tab on ETU housing (2). Refer to Figure 5.

NOTE For belt adjustment and tensioning see 'Tension the divert blade belt', page 28.

NOTE Torque for screw M10x25 (2) = 54Nm





Step 11 Check belt length.

NOTE Belt length should be as listed below. However, if after tensioning the belt, the bolts are at or very close to the end of the slot, chances are the belt is too long.

- **US length: Belt length = 3483.12 mm**
- **EU length: Belt length = 3583.12 mm**

  - BOLTS AT END OF SLOT = WRONG!
  - BOLTS NEAR MIDDLE OF SLOT = CORRECT!

NOTE After tensioning belt, the bolts must be near the middle of slot. If end of adjustment is reached, the belt is too long and must be replaced.

Procedure Assemble the Reaction Beam

WARNING **Heavy part!**

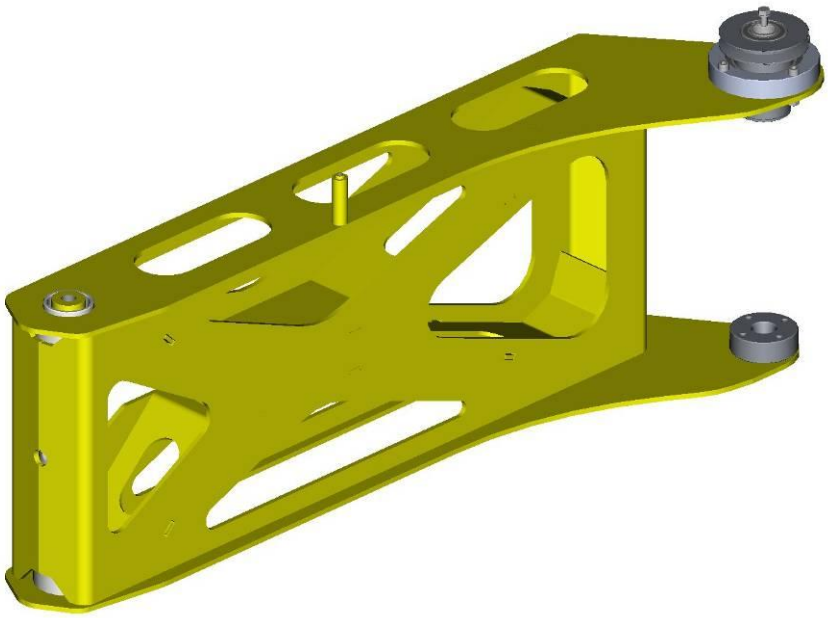


Figure 6 Reaction beam left

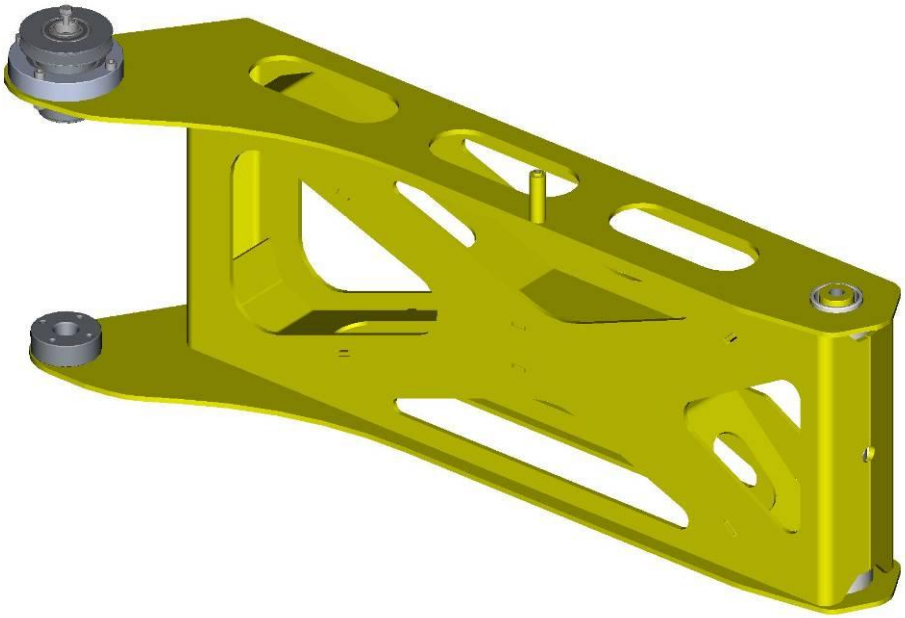
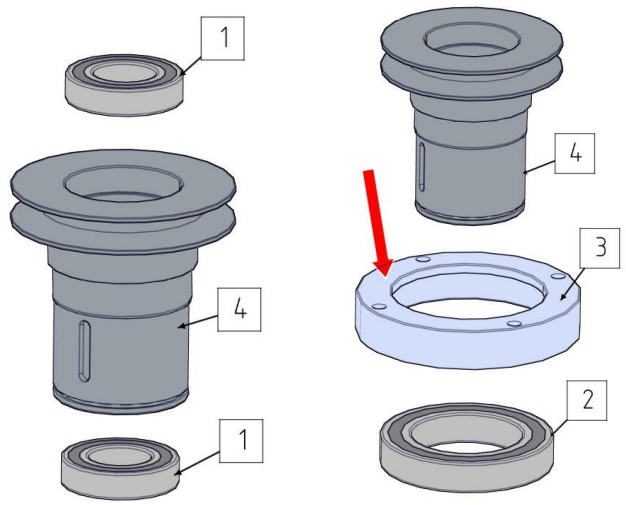


Figure 7 Reaction beam right



Step 1 Assemble hollow pulley (4) and outer housing bearing (3)

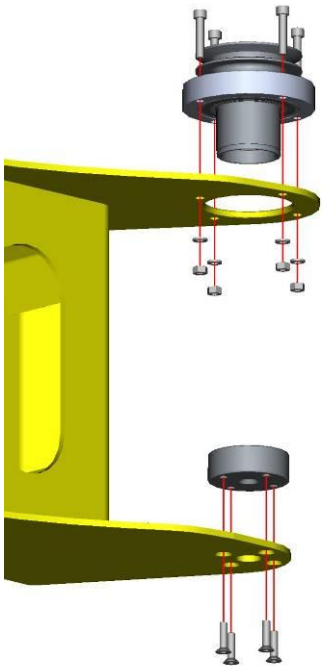
⇨ (4) N55302-623	(1x)	Hollow shaft v-belt pulley
⇨ (3) N55302-624	(1x)	Bearing house
⇨ (2) N04933-00007	(1x)	Bearing type 6013.2RS C3 (supplier SKF)
⇨ (1) N04933-00003	(2x)	Bearing type 6006-2RS1 (supplier SKF)

- Press bearings (1) into hollow pulley (4).
- Press bearing (2) into bearing housing (3).

NOTE Use hydraulic press to mount bearings.

NOTE Make sure to position lip on bearing house(3) on top (see arrow)

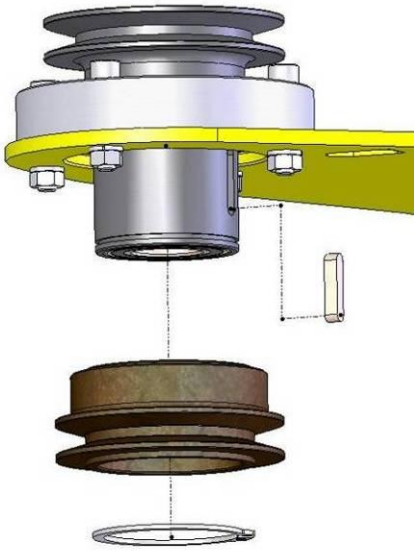
NOTE See SKF bearing pressing instructions on page 35.



⇨ 002419-08040	(4x)	Hex. socket head cap screw M8x40
⇨ 002764-00008	(4x)	Spring lock washer M8
⇨ 002370-88008	(4x)	Hex. nut M8
⇨ N55302-627	(1x)	Shaft holder
⇨ 002412-00825	(4x)	Hex. socket countersunk head screw M8x25

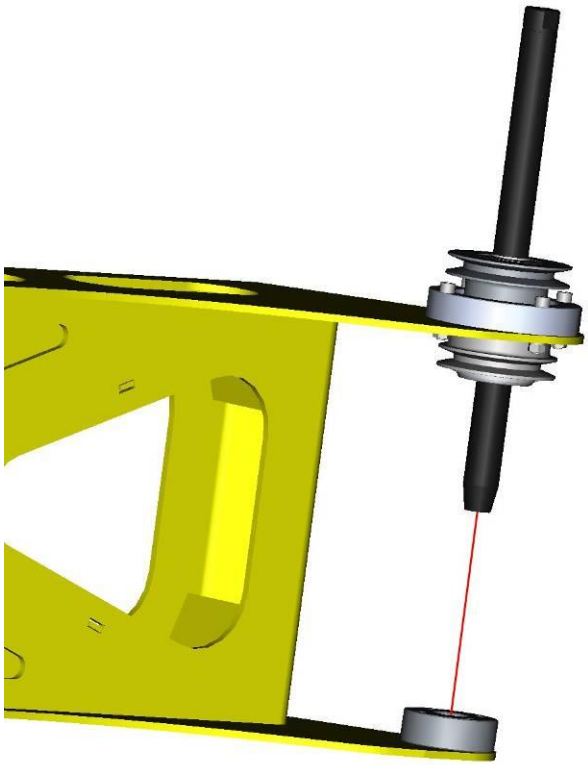
Step 2 Mount hollow pulley assembly and shaft holder on reaction beam

NOTE Do not tighten the bolt connection until ProcedureStep 0End of procedure!



Step 3 Mount power transmission pulley

⇨ N55302-642	(1x)	v-belt pulley
⇨ N02009-00005	(1x)	Retaining ring for shaft ø 63mm
⇨ N02009-00001	(1x)	Key .236x.236 L=1.181 (6x6 L= 30mm)



N55302-317 Shaft divert blade

CAUTION Do not force shaft into alignment

Step 4 Test alignment by inserting shaft

If shaft sits in the centre of the bottom disk

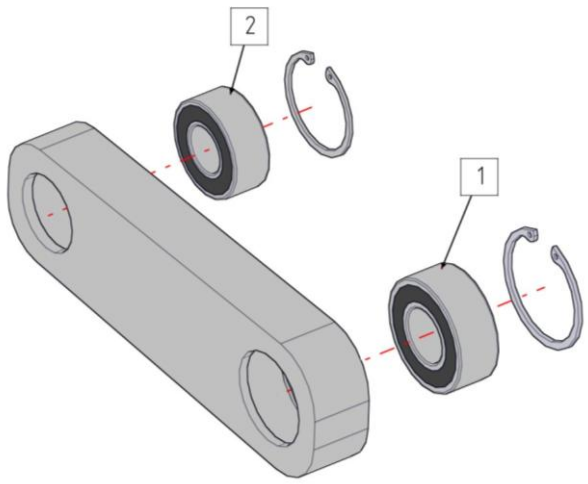
- Secure the bolts

If shaft does **not** sit in the centre

- Check the reaction beam alignment and correct the alignment as required.

END OF PROCEDURE!

Procedure Assemble the HCD



Step 1 Assemble connecting rod

⇨ N55302-619	(1x)	Connecting rod
⇨ (1) N04933-00004 bearing	(1x)	Sealed spherical roller BS2-2206 C-2CS/VT1898 (supplier SKF)
⇨ (2) N04933-00006 bearing	(1x)	Sealed spherical roller BS2-2207 C-2CS/VT1898 (supplier SKF)
⇨ N02009-00004 62mm	(1x)	Retaining ring for hole ø
⇨ N02009-00002 72mm	(1x)	Retaining ring for hole ø

NOTE Use hydraulic press to mount bearings.

NOTE See SKF bearing pressing instructions on page 35.

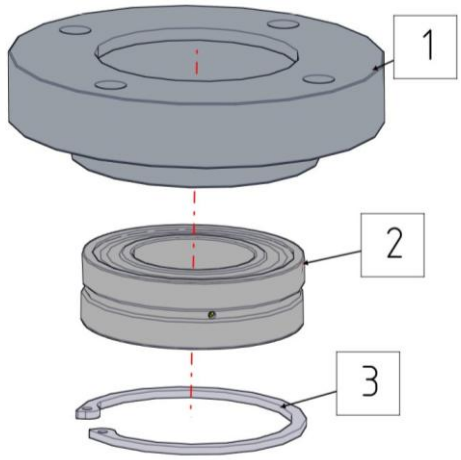


Figure 8 Upper bearing

Step 2 Assemble upper and lower bearing

Upper bearing

⇨ (1) N55302-698	(1x)	Upper bearing house
⇨ (2) N04933-00010 2210-	(1x)	Roller Bearing SKF BS2-2CSK/VT1898/R816
⇨ (3) 002745-00090	(1x)	Ring Ret Bore J90

Lower bearing

⇨ (4) N04933-00009 2210-	(1x)	Roller Bearing SKF BS2-2CS/VT1898/R816
⇨ (5) N55302-697	(1x)	Lower bearing house

NOTE See SKF bearing pressing instructions on page 35.

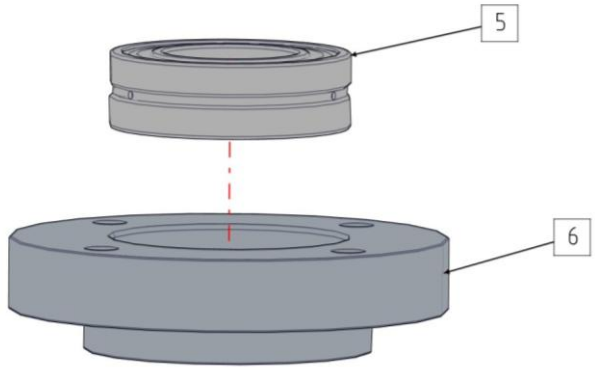


Figure 9 Lower bearing

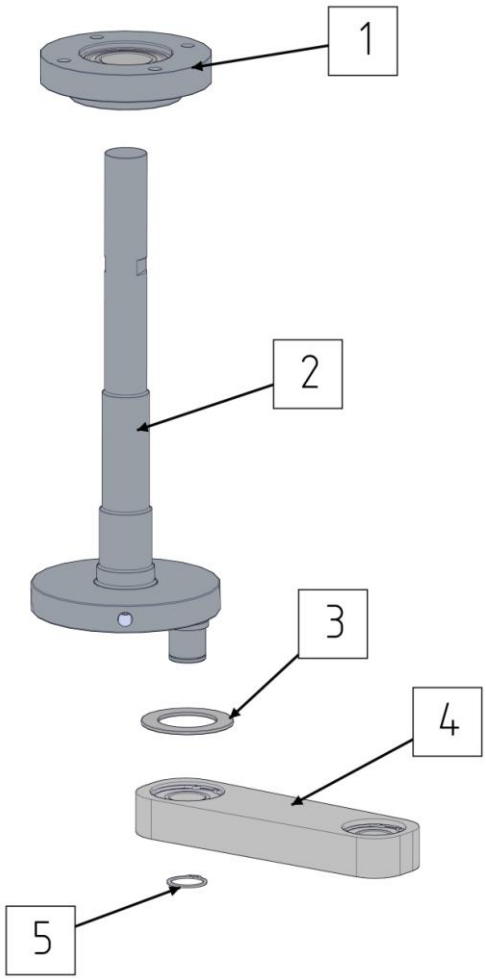


Figure 10 Crank mechanism

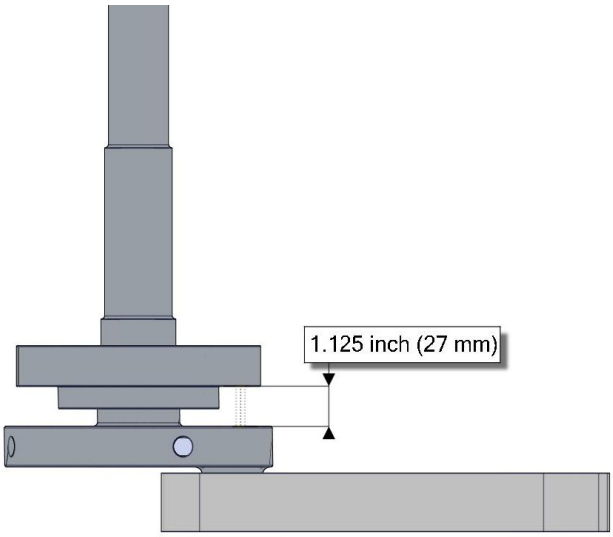


Figure 11 Adjustment lower bearing

Step 3 Assemble crank mechanism

Gather the following parts

⇨ (3) N55302-518	(1x)	Overturn reducing ring
⇨ (4) N55302-011	(1x)	Connecting rod assy
⇨ (5) N02009-00003	(1x)	Retaining ring for shaft ø 35mm
⇨ (2) N55302-701	(1x)	Gluing assy crank mechanism

- Mount lower bearing (1) on crank mechanism (2)

NOTE Ensure distance between lower bearing house and crank mechanism to 1.125 inch (27mm), using a spacer.

NOTE See SKF bearing pressing instructions on page 35.

- Position reducing ring (3) on crank mechanism (2)
- Mount crank mechanism (2) on connection rod assy (4)
- Fix assembly with retaining ring (5)

NOTE Mount connection rod with retaining ring pointed downwards.

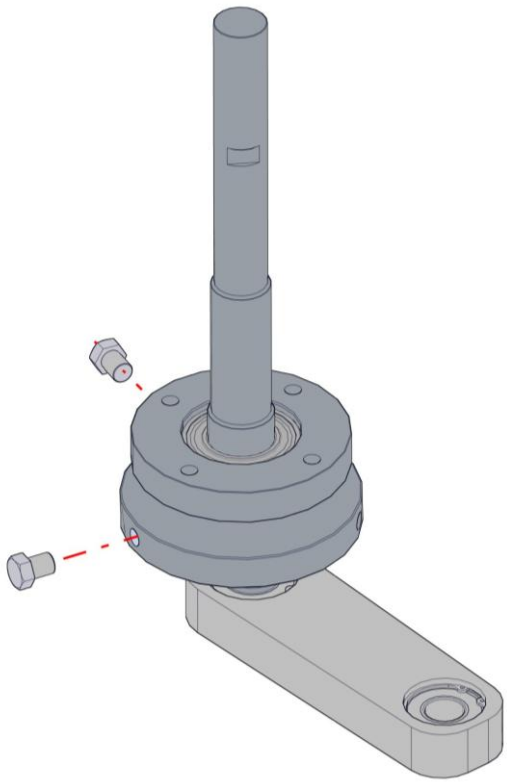


Figure 12 Right hand version

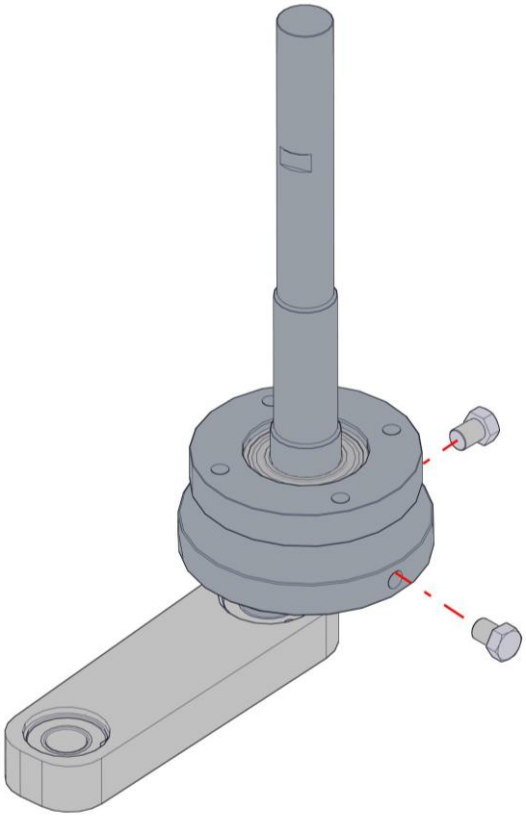


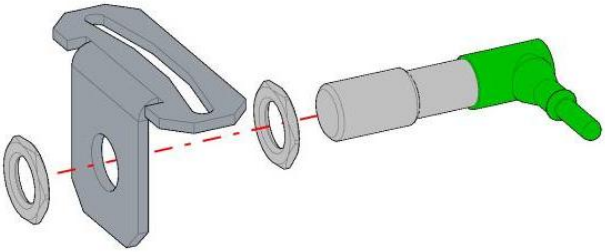
Figure 13 Left hand version

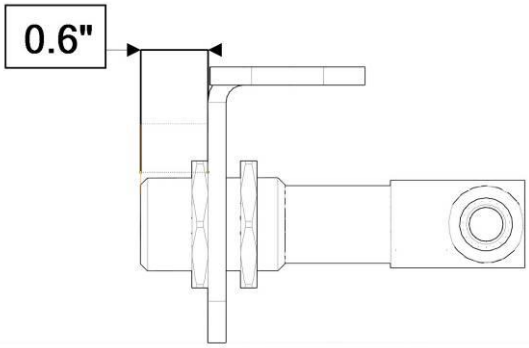
CAUTION **All bolts must be secured with Loctite nr. 243.**

⇨ 002311-16020 (2x) Bolt HH FT M16x20

Step 4 Mount break sensor flags

NOTE Make sure the bolts are mounted in the correct position. See Figure 12 and Figure 13





⇨ N55302-549	(2x)	Bracket brake proximity sensor
⇨ N09032-00007	(2x)	Induct Prox Sensor XS518B1PAM12 (Supplier Schneider),

Step 5 Pre-assemble brake proximity sensor.

NOTE Adjust at FAT (final test)

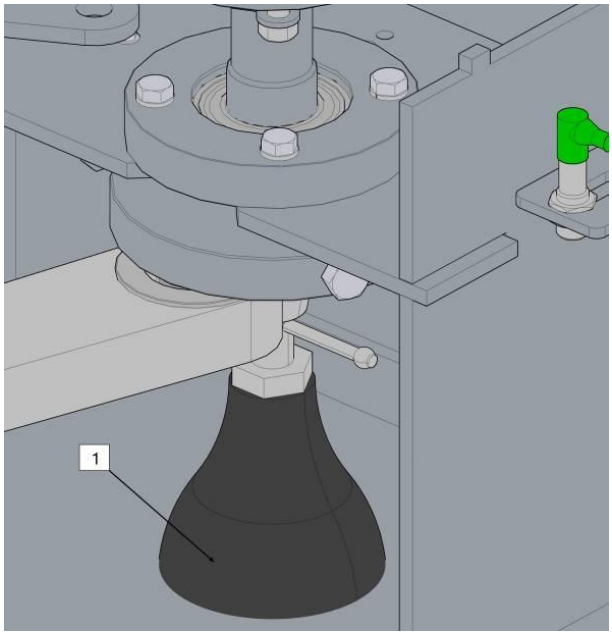


Figure 14 Use a jack (1)

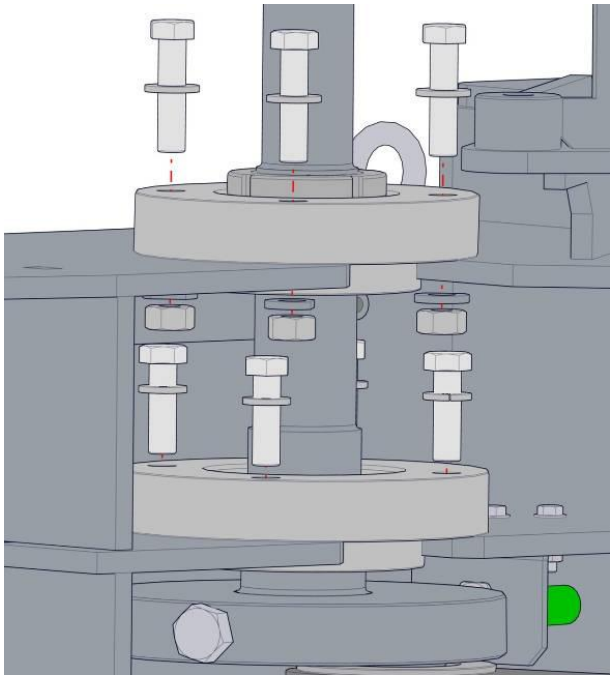
		Jack

Step 6 Mount crank mechanism

⇨ N55302-001	(1x)	Main frame HCD left
Or		
⇨ N55302-015	(1x)	Main frame HCD right
⇨ 002311-12060	(4x)	Hex. head bolt M12x60 (Top)
⇨ N55302-599	(4x)	Shim ring (top)
⇨ 002370-88012	(4x)	Hex. nut M12 (Top)
⇨ 002311-12040	(4x)	Hex. head bolt M12x40 (Bottom)
⇨ 002764-00012	(8x)	Spring lock washer M12
⇨ 008200-04239		Loctite 243

CAUTION Use a jack (1) when lowering the crankshaft.

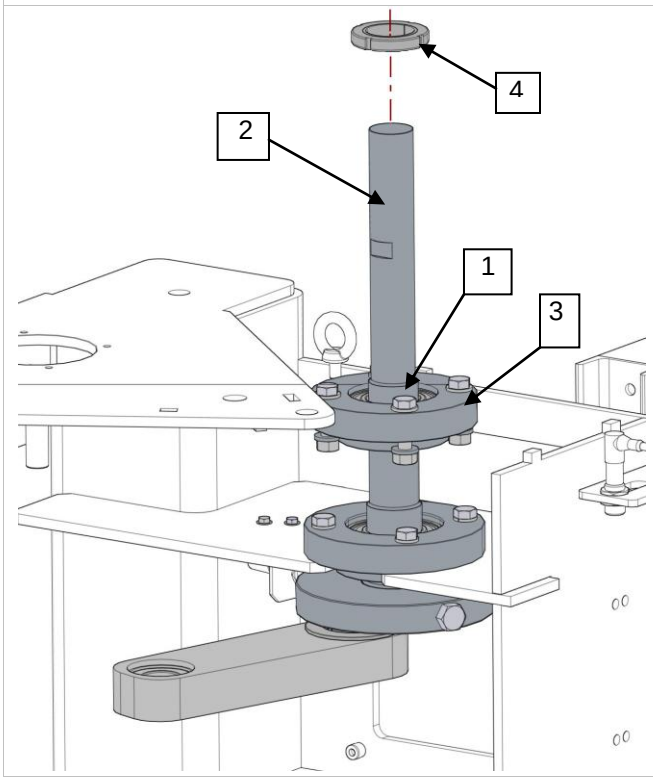
CAUTION Mount flat edge of the shim rings to the inside.



NOTE Make sure crank mechanism can rotate freely without interference with the proximity sensors.

NOTE Torque bolt s= 93Nm

NOTE Secure the bolts with Loctite 243

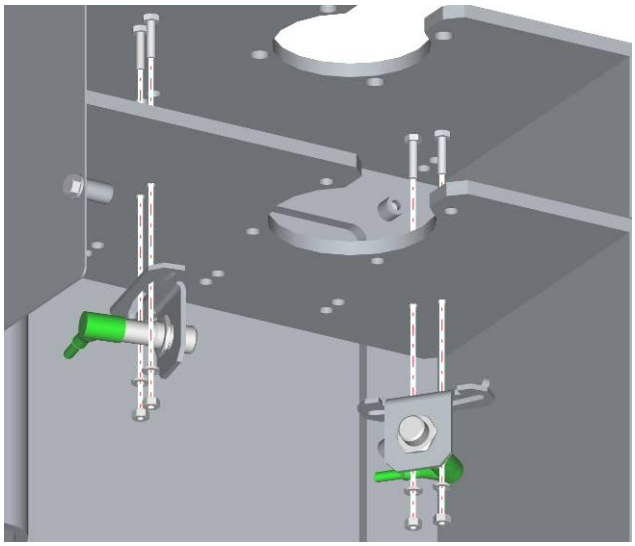


- ⇨ Upper bearing assy (1x) Upper bearing
- ⇨ (1) N04933-00008 (1x) Bearing Accessories
  H310E (clamping bush)

Step 7 Mount clamping bushing and bearing on crank shaft.

- Place adapter sleeve (1) on crank shaft (2); thin portion up.
- Slide bearing/housing (3) on the shaft and over adapter sleeve.
- Screw in lock collar (4) until is hand tight.
- Using a spanner wrench, add 2/3 of a turn.

NOTE Check manufacturer's instructions and specs.



⇨ N55302-549	(2x)	Bracket brake sensor
⇨ 09032-00007	(2x)	Induct Prox Sensor XS518B1PAM12 (supplier Schneider)
⇨ 002311-06025	(4x)	Hex. head bolt M6x25
⇨ 002763-00306	(4x)	Filling washer M6
⇨ 002764-00006	(4x)	Spring lock washer M6
⇨ 002370-88006	(4x)	Hex. Nut M6 (bottom)
⇨ 008200-04239		Loctite 243

Step 8 Mount brake proximity sensor

NOTE Check if distance between the Prox. sensor and sensor bolt = 2mm to 3 mm.

NOTE Secure the bolts with Loctite nr. 243

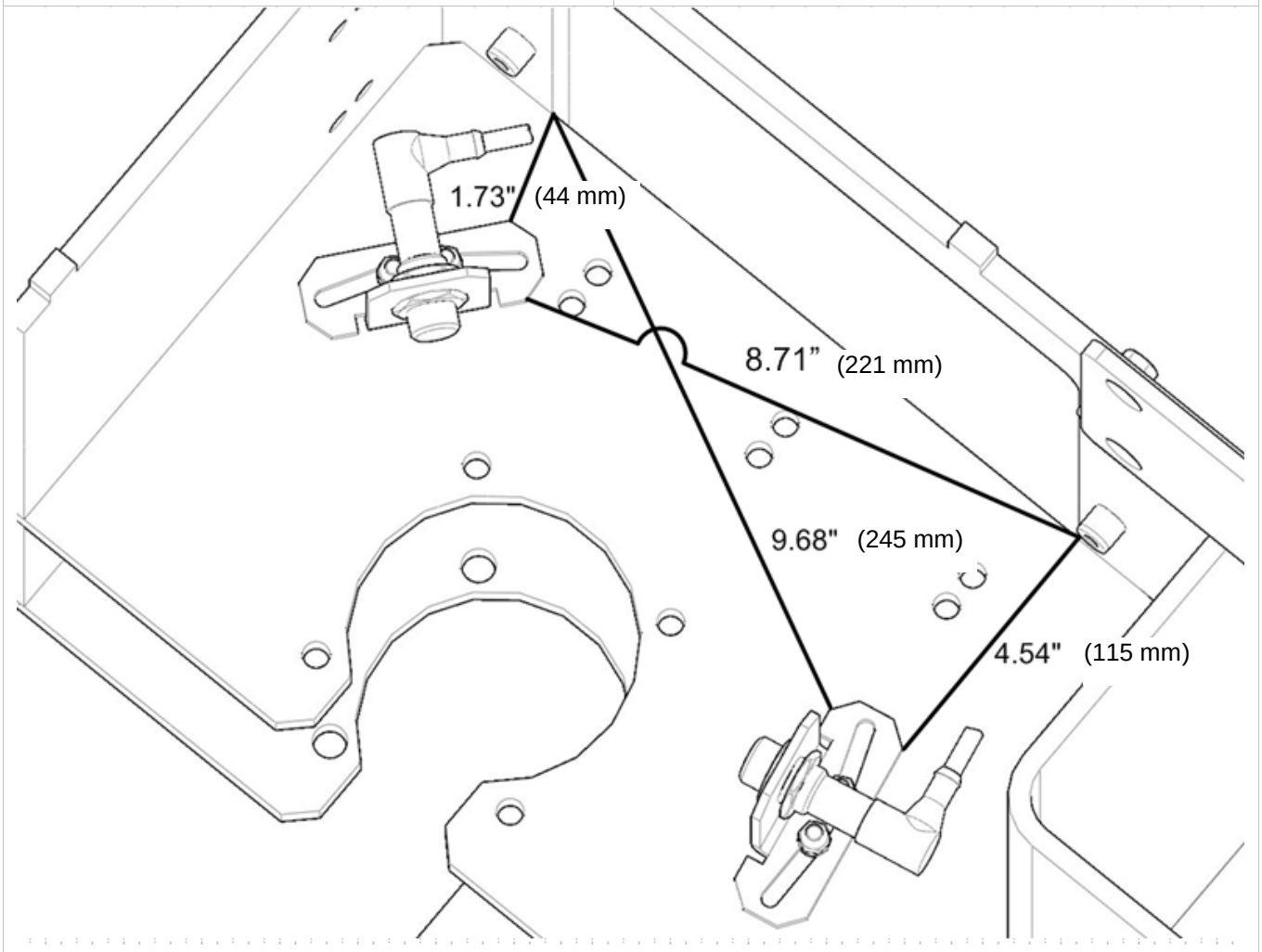


Figure 15 Proximity switch locations (final adjustment during FAT)

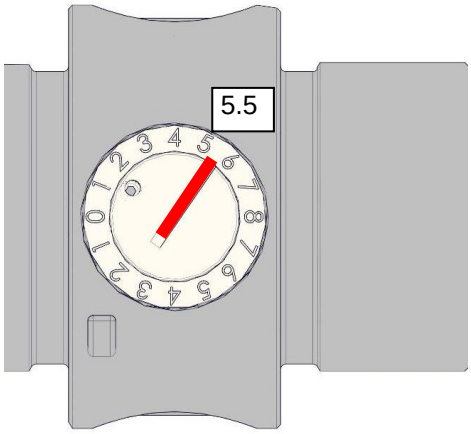


Figure 16 Setting dial

⇨ N55302-021 Shock absorber OEMXT 1.5M x 2 (Supplier ENIDINE)

Step 9 Adjust shock absorber setting

NOTE Set to level 5.5 in either direction (CW or CCW)

- Lock by tightening the set screw using the Allen wrench provided with the shock absorber.

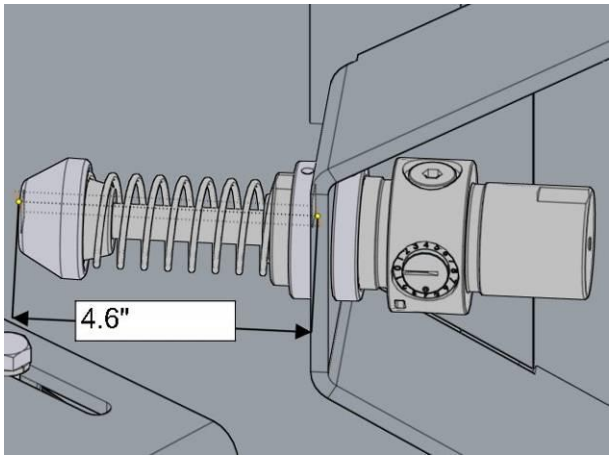


Figure 17 Finished assembly

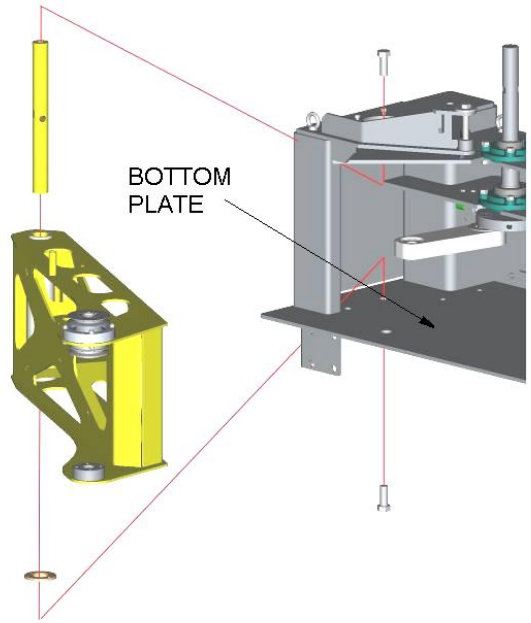
⇨ N55302-021 Shock absorber OEMXT 1.5M x 2 (Supplier ENIDINE)
⇨ N03804-60001 (2x) Lock Ring OEMXT M42x1.5
⇨ N03804-70001 Urethane Striker Cap No. UC2940

Step 10 Mount shock absorber

- Screw in one lock ring in shock absorber.
- Place shock absorber in bracket as shown.
- Add second lock ring and secure shock absorber to bracket to dimension shown.
- Place striker cap.

NOTE Set distance from the face of the bracket to the tip of the striker cap to 4.6" in the extended position. See also drawing N55302-021.

NOTE Ensure the dial is facing to the outside as shown in figure.



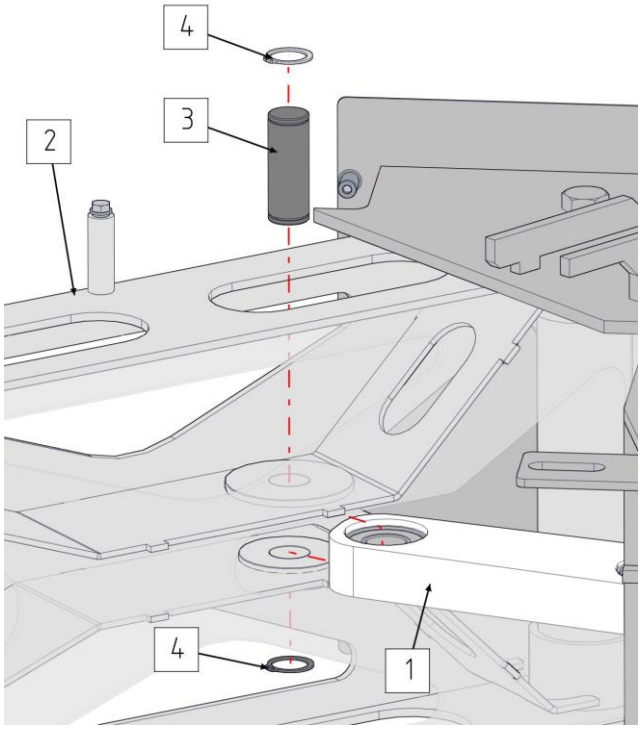
WARNING Heavy part!

⇨ N55302-581 (1x) Shaft reaction beam ø40
⇨ N02006-00001 (1x) Oil free thrust washer MPWZ 40 (supplier Misumi)
⇨ 002311-20050 (2x) Hex. head bolt M20x50

Step 11 Mount reaction beam

NOTE Ensure that reaction beam is parallel to bottom plate of main frame prior to tightening bolts.

NOTE Torque for M20 bolt = 390Nm



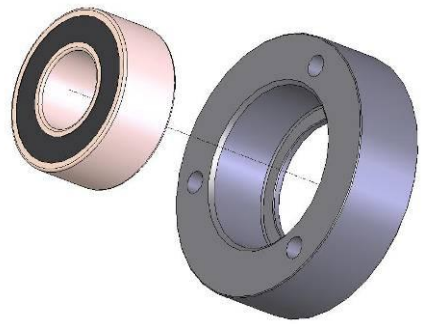
⇨ N02005-00006	(1x)	Shaft PHFRR 25-82-B5-S5 (supplier Misumi)
⇨ 002746-00027	(2x)	Retaining ring for shaft ø 27mm

Step 12 Connect reaction beam and connecting rod

- Position the connecting rod (1) in the reaction beam (2)

NOTE Mount connection rod [1] with retaining ring pointed downwards.

- Mount shaft (3)
- Mount retaining rings (4).

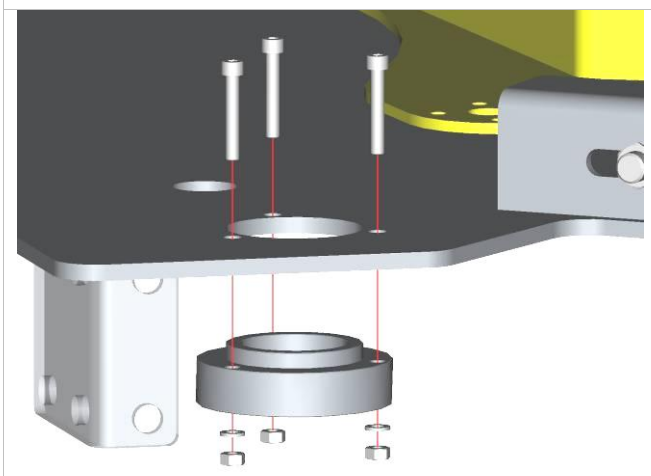


⇨ N55302-649	(1x)	Bearing disc
⇨ N04933-00004	(2x)	Sealed spherical roller bearing BS2-2206 C-2CS/VT1898 (supplier SKF)

Step 13 Assemble bearing disk and sealed roller bearing

NOTE Use hydraulic press to mount bearings

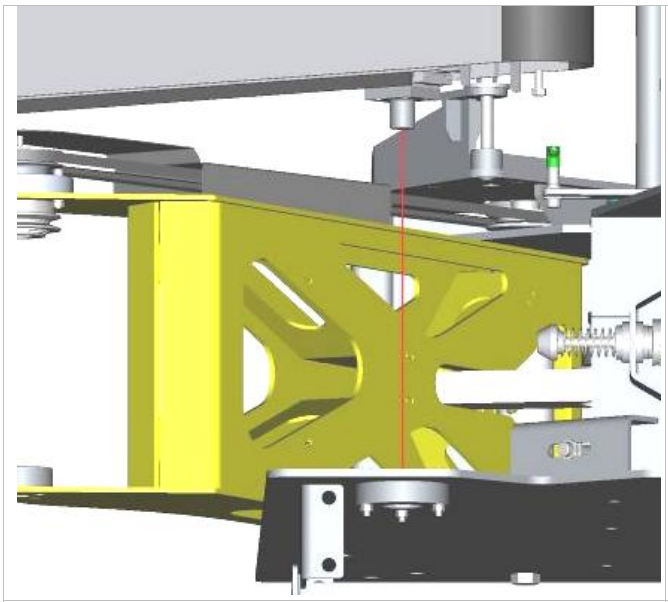
NOTE See SKF bearing pressing instructions on page 35.



⇨ N55302-025		Bearing Assy
⇨ N55302-001	(1x)	Main frame (Left)
Or		
⇨ N55302-015	(1x)	Main frame (right)
⇨ 002764-00008	(3x)	Washer Lock Spring M8
⇨ 002419-08050	(3x)	Screw HS M 8x 50
⇨ 002370-88008	(3x)	Nut Hex M 8

Step 14 Mount bearing assembly

NOTE Torque = 27Nm



WARNING **Heavy part.**

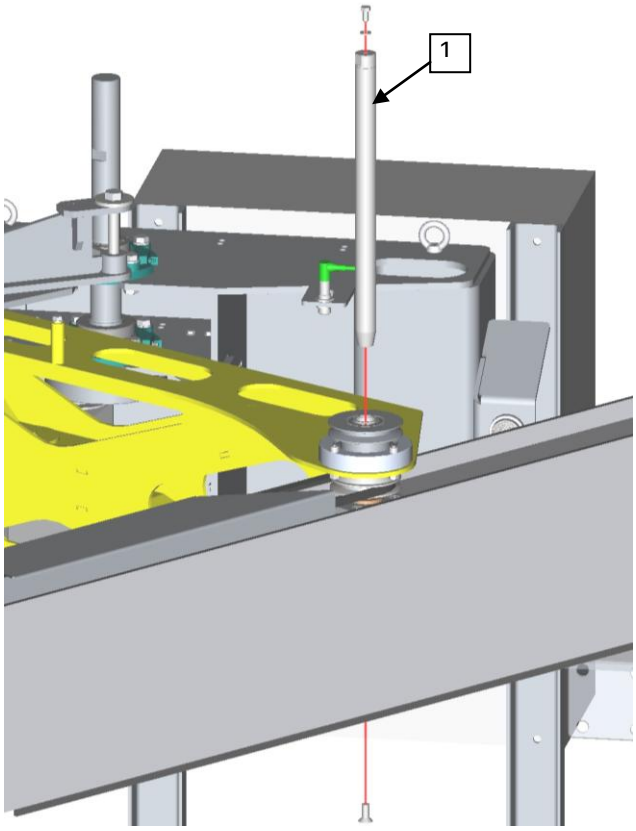
⇨ N55302-024 Divert blade

Step 15 Mount divert blade assembly

- Lower divert blade such that pivot shaft slides into pivot bearing

NOTE Careful manoeuvring is required to insert shaft in bearing

- Swing divert blade into reaction beam; continue to hold for following step.



Gather the following items

⇨ N55302-317	(1x)	Shaft divert blade
⇨ N02009-00006	(1x)	Retaining ring shaft 30
⇨ 002421-10010	(1x)	Hex. socket countersunk head
⇨ 002421-10010	(1x)	screw M10x25 (Stainless steel A2)
⇨ 008200-04239		Loctite 243

NOTE Prior to mounting on reaction beam, ensure that shaft (1) fits and rotates freely in bushings of aluminum diverter

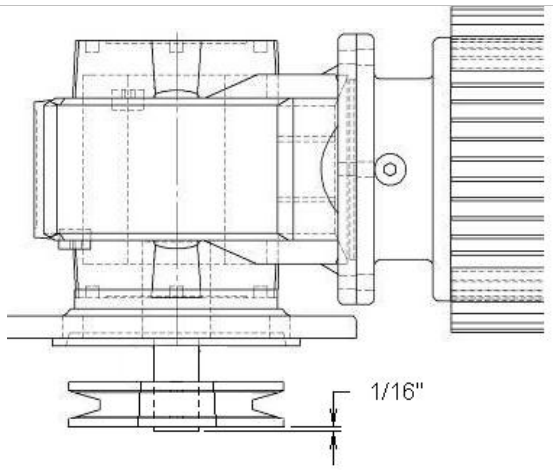
Step 16 Mount Divert Blade spacer washer & shaft

- Slide shaft through to bottom disk
- Secure with flat head screw.

NOTE Apply Loctite 243

NOTE Torque of shaft screw = 54Nm

NOTE Check distance between rubber sweep and bottom plate mainframe; should be approximately 4mm.



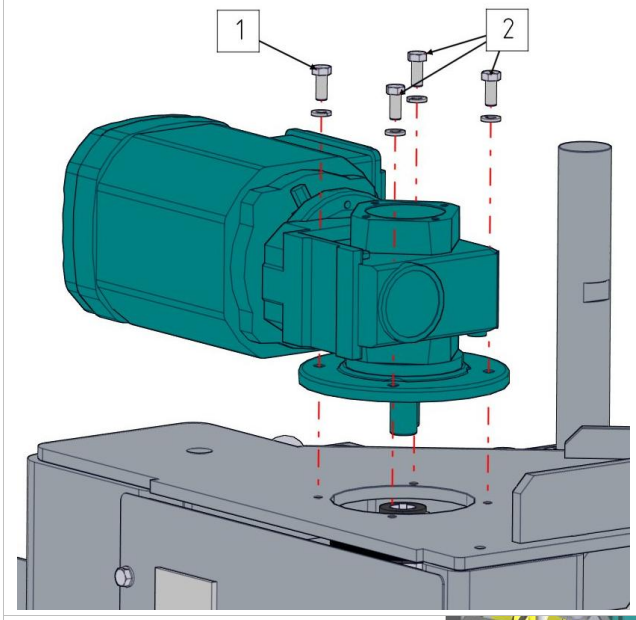
⇨ N55302-319	(1x)	Motor pulley, taperlock
⇨ N00706-XXXXX	(1x)	Motor V-belt (see spec) DRE SF37DT80K2 M5 270 I=see spec. flange 160 mm (SEW) Left execution.

or

⇨ N00706-XXXXX	(1x)	Motor V-belt (see spec) DRE SF37DT80K2 M5 90 I=see spec. flange 160 mm (SEW) Right execution.

Step 17 Mount the pulley on output shaft

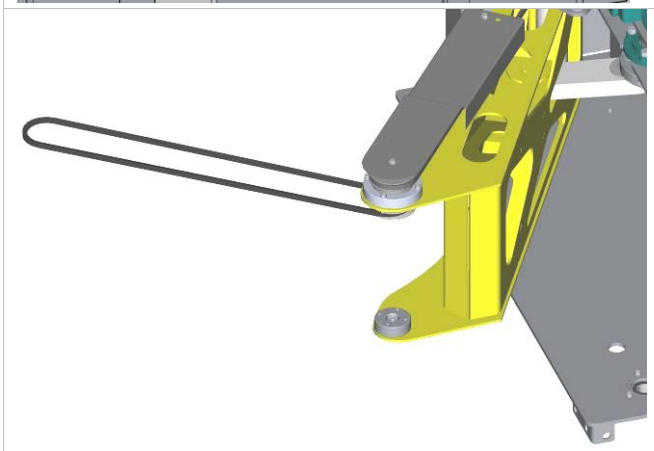
- Mount at 1/16" from end of shaft as indicated in adjacent figure.
- Follow manufacturer's taper lock mounting procedure.



⇨ 002764-00008	(4x)	Spring lock washer M8
⇨ (1) 002311-08020	(1x)	Bolt HH FT M 8x 20
⇨ (2) 002311-08025	(3x)	Bolt HH FT M 8x 25

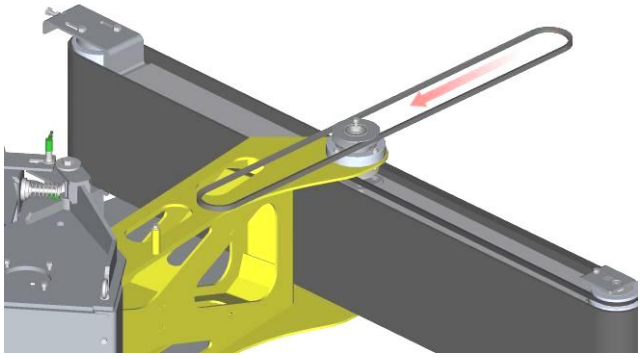
Step 18 Mounting the Divert Blade motor

- Secure all bolts with Loctite nr. 243



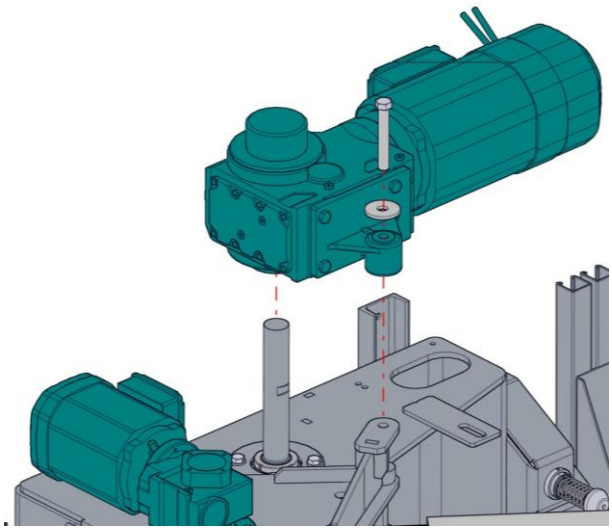
⇨ N04503-41800(1x) V-Belt, Optibelt Red power 3 #SPA L=1800mm Endless

Step 19 Mount V-belt on the Divert Blade



N04503-42282(1x) V-Belt, Optibelt Red power 3 #SPA L=2282mm Endless

Step 20 Install V-belt on reaction beam



WARNING HEAVY PART!

⇨ 002763-00116	(2x)	Washer high, wide M16
⇨ 002311-16110	(1x)	Hex. head bolt M16x110
⇨ N00706-24001	(1x)	Crank Motor DRE KT67TDV100M4 BMG4 HR TF ES1S I=24 (supplier SEW), More info see spec's. Picture shows left execution

or

⇨ N00706-24002	(1x)	Crank Motor DRE KT67TDV100M4 BMG4 HR TF ES1S I=24 (supplier SEW), More info see spec's. Right execution

Step 21 Mounting the Crank motor

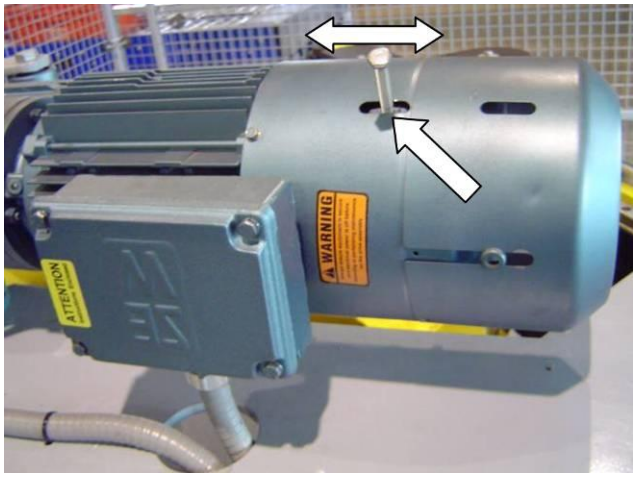


Figure 18 Motor break release lever

CAUTION Make sure to use the right holes for mounting the drive (see pictures below)

NOTE For correct torque values, refer to Torque values stop ring on page 32 and Torque values locking screws on page 33

NOTE The divert blade can extend/retract manually. It can be done by pulling the motor brake release lever to the backside of the Motor, see Figure 18

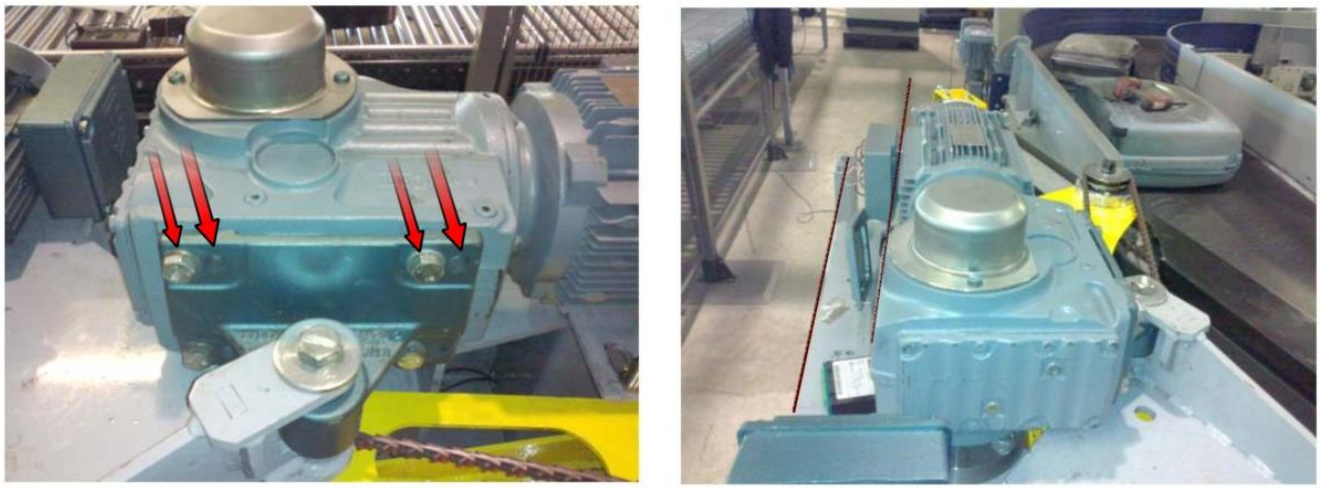


Figure 19 Correct positioning of bolts

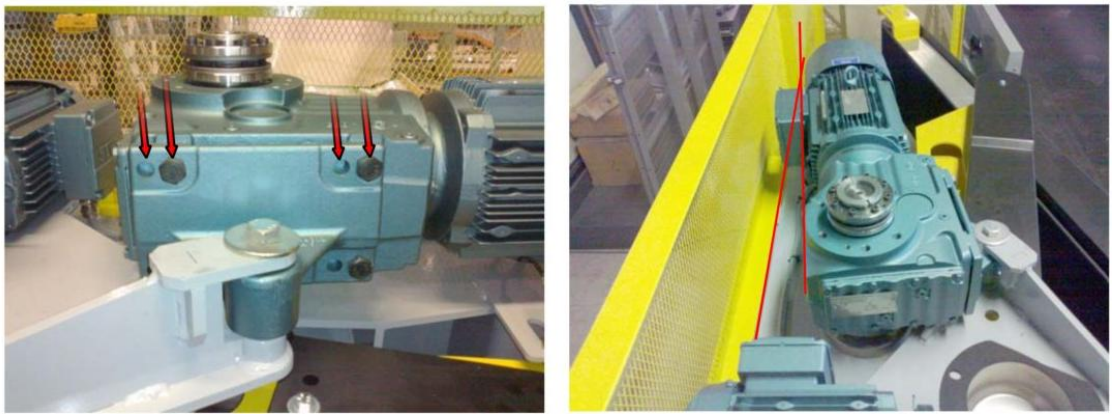


Figure 20 Wrong positioning of bolts

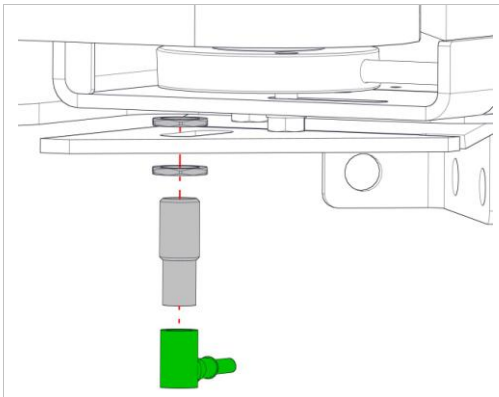


Figure 21 "Extend" sensor

⇨ N09032-00007 (2x) Induct Prox Sensor Schneider XS518B1PAM12, (Sensor & 2 Nuts)

Step 22 Mount proximity sensors

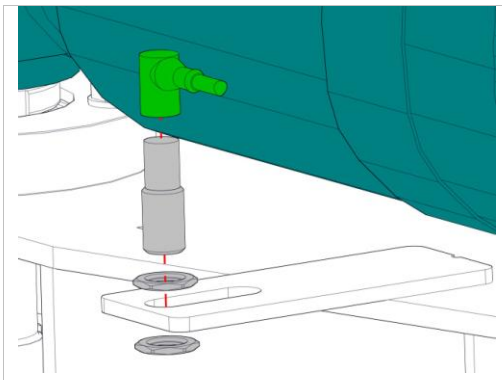
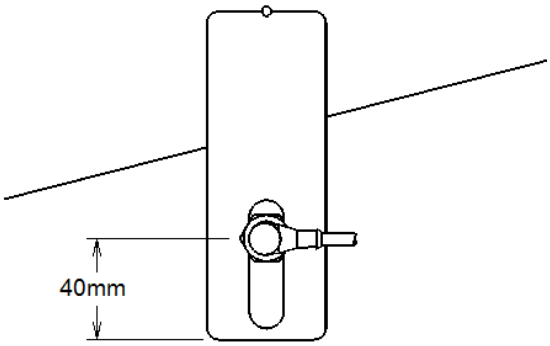
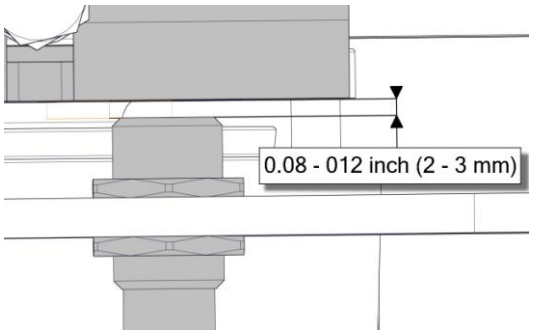


Figure 22 "Home" sensor





Step 23 Adjust proximity sensors

NOTE Initial distance from edge of bracket to center of prox switch is 40mm. This can be adjusted during FAT if necessary.

NOTE Distance between sensors and target must be 2mm to 3 mm.

Ensure nuts are tightened after adjustments.

NOTE Test the mechanical movement of the HCD by hand. Make sure that the reaction beam and the divert blade move without interferences.

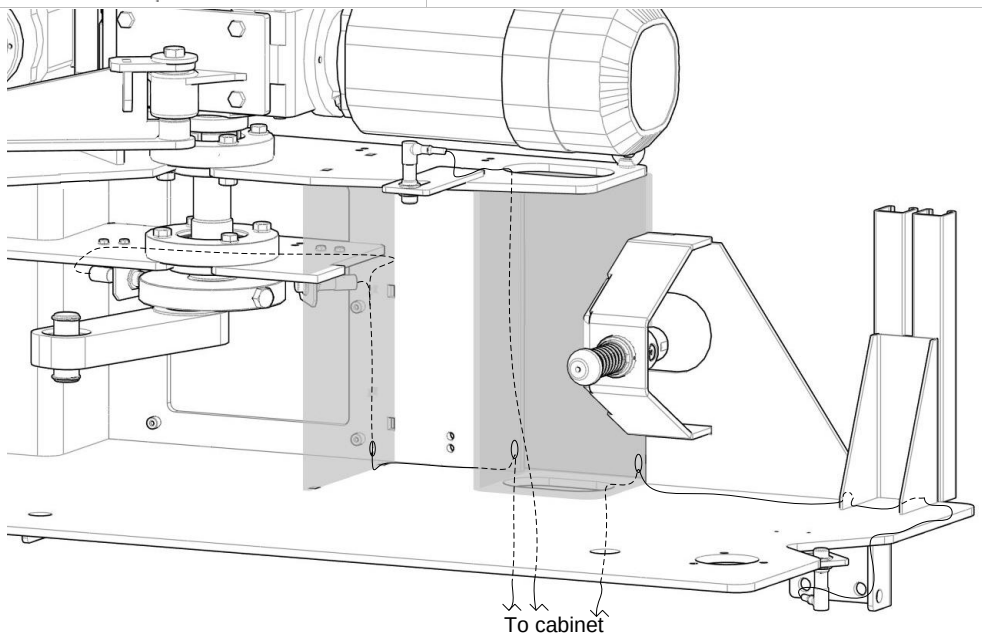


Figure 23 Wiring

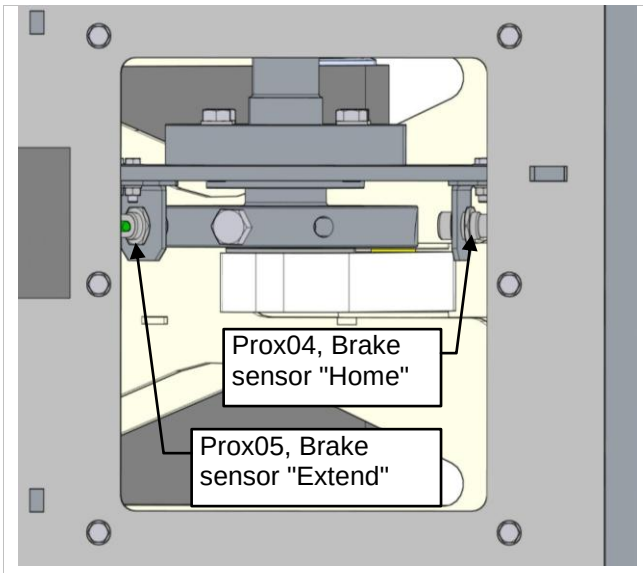


Figure 24 Brake sensors

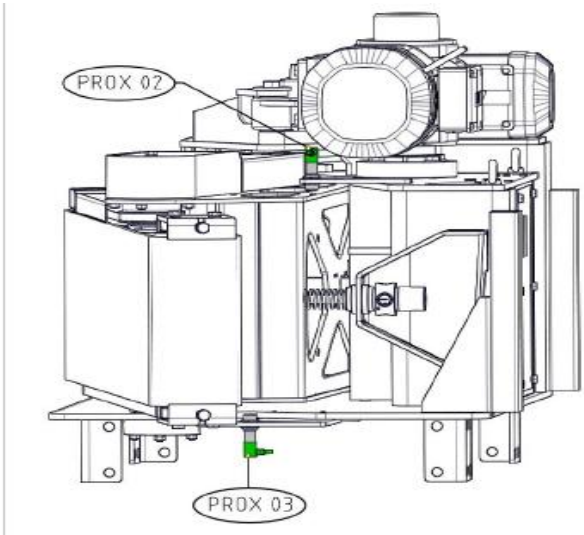


Figure 25 Position sensors

NOTE For electrical wiring drawings, refer to:
N55302-080-00000
N55302-080-00300

Step 24 Connecting the electrical equipment according to drawings as mentioned above

- Connect electrical equipment.
- Label all motor and sensor cables as indicated on table below.

Cable Labeling	
Device	Label nomenclature
MTR1 (3hp)	X3
BRK1 (3hp)	X4
MTR2 (1hp)	X5
PROX02	X6
PROX03	X7
PROX04	X8
PROX05	X9

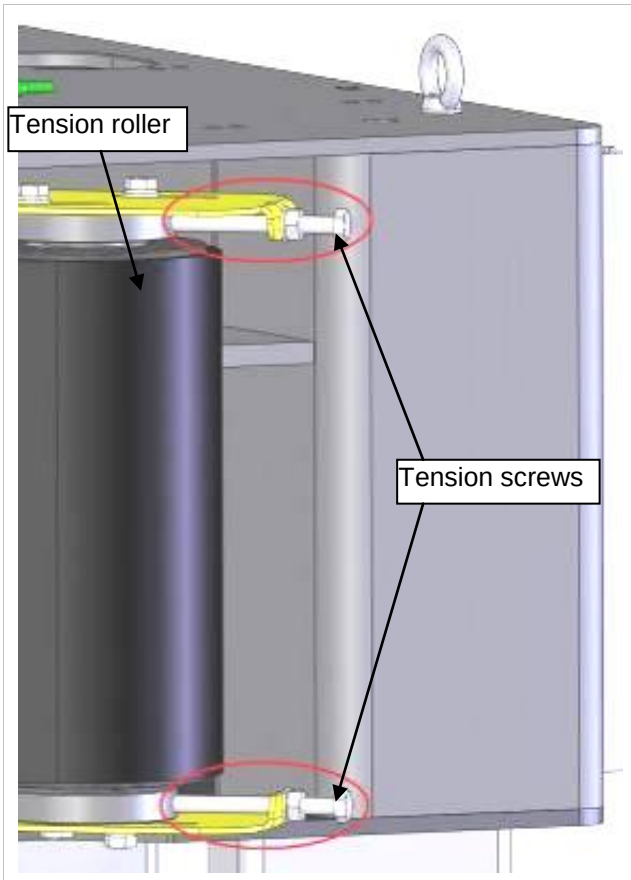


Figure 26 Adjustment divert blade belt

Step 25 Tension the divert blade belt

- Place divert blade in the "extend" position.
- Loosen the four top and bottom screws from the tension roller.
- Place marks along the centreline of the belt at a distance of 1000mm.
- Increase the belt length by turning the tension screws (both by the same amount) until the distance between the marks measures 1005-1006 mm.

NOTE Tension = 0.5% length increase for belt type PHR2-90MF RT X BB-GP black supplier Siegling).

NOTE Maximum 0.6% is allowed by Siegling.

- Track the belt by slightly tightening or releasing the top or bottom tension bolts.
- Ensure the belt is running in the middle of the rollers for 2 to 3 minutes.
- When the belt is tracking in the middle, tighten the four screws of the tension roller.
- Secure the tension screws with jam nuts.

Step 26 Test and check the HCD according to (FAT):

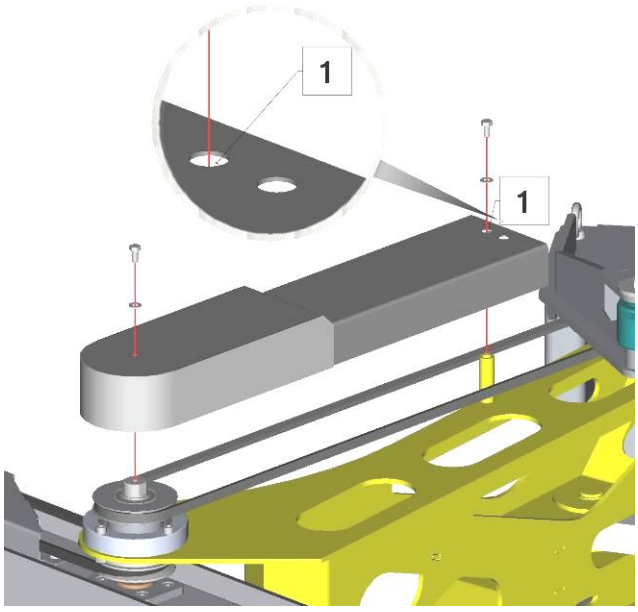
A_DOC069815 Checklist High Capacity Diverter

WARNING Block off the area for safety while testing.

WARNING Make sure that the HCD is anchored to a suitable frame for testing.

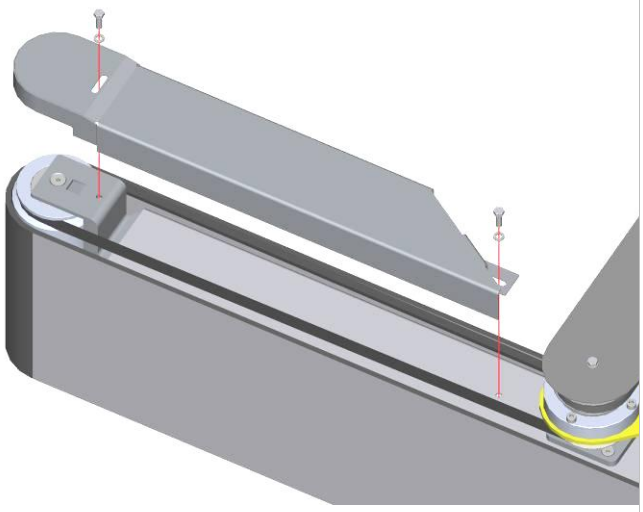
- Test the HCD by moving the reaction beam / divert blade slowly, using the control panel.
- Make sure that the crankshaft/disk rotates in the proper direction.

NOTE Connection rod always turns 180° clockwise and counter clockwise at the side of the arrow (see figure)



- ⇨ N55302-304 (1x) Assy v-belt cover
- ⇨ 002311-08015 (2x) Hex. head bolt M8x16
- ⇨ 002770-99008 (2x) Plain washer M8

Step 27 Mount v-belt cover of the reaction beam

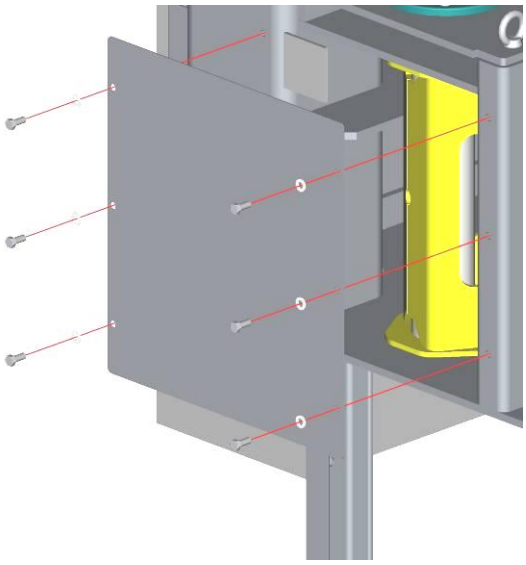


- ⇨ N55302-334 (1x) V-belt cover left

Or

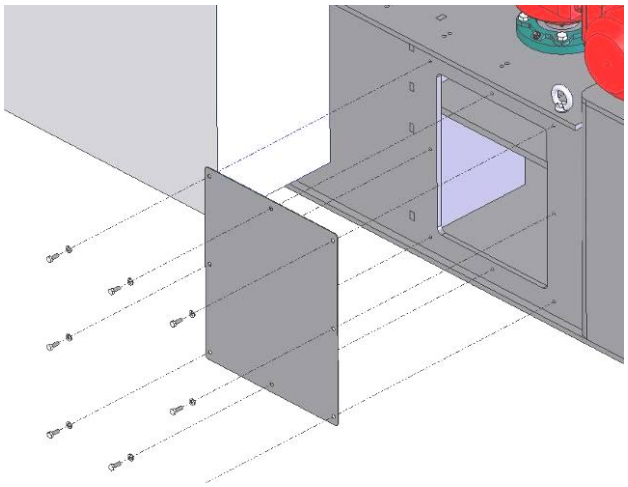
- ⇨ N55302-332 (1x) V-belt cover right
- ⇨ 002311-08015 (2x) Hex. head bolt M8x16
- ⇨ 002770-99008 (2x) Plain washer M8

Step 28 Mount v-belt cover of the divert blade



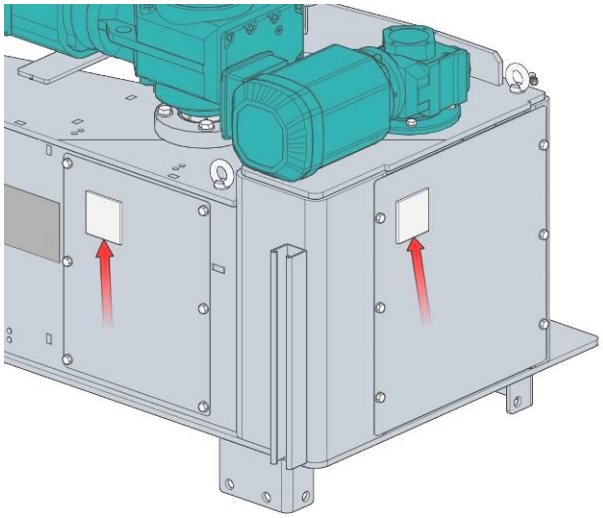
- ⇨ N55302-695 (1x) Plate 3 cover Vertibelt
- ⇨ N09305-09403 (6x) Press nut 94020A395
- ⇨ 002311-08020 (6x) Hex. head bolt M8x20
- ⇨ 002770-99008 (6x) Filling Washer M 8

Step 29 Mount side cover



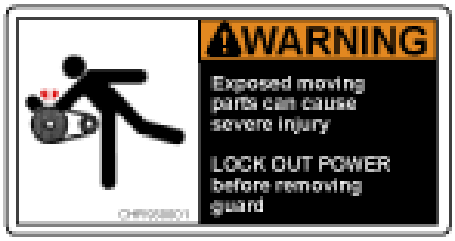
⇨ N55302-641		Cover plate
⇨ N09305-09403	(6x)	Press nut 94020A395
⇨ 002311-08020	(6x)	Hex. head bolt M8x20
⇨ 002770-99008	(6x)	Filling Washer M 8

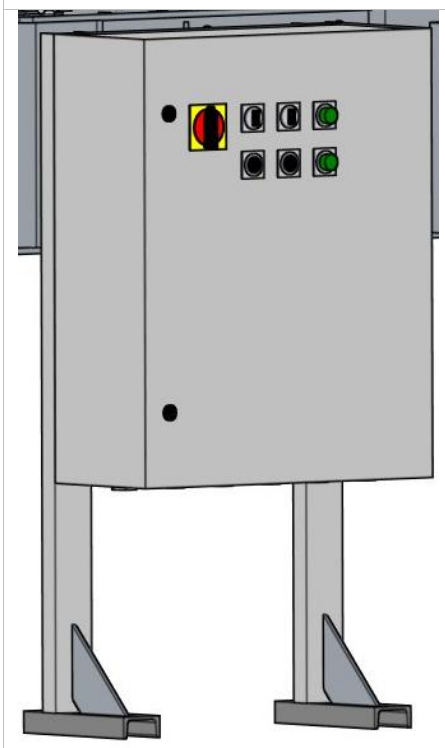
Step 30 Mount back cover



⇨ N02004-00006 US Item number, 5"Wide x 2 1/2 High(2x)

Step 31 Add safety Stickers on both back and side covers (see arrows in picture).





⇨ N55302-337	(2x)	Bracket Control box, See Spec's
⇨ 002311-10025	(4x)	Hex. head bolt M10x25
⇨ 002764-00010	(4x)	Spring lock washer M10
⇨ 002370-88010	(4x)	Hex. nut M10

To be done at panel manufacturer

Step 32 Add the safety Stickers on the control box

NOTE Legs are installed at site

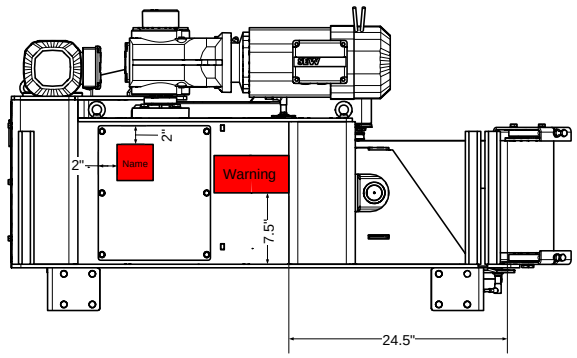


Figure 27 Nameplate and warning plate location

- ⇨ N02004-00006 Nameplate supplied by VI 8" wide x 4" high (1x)
- ⇨ N02004-00092 Warning Plate - Crankshaft Operating Side

Step 33 Add nameplate to HCD

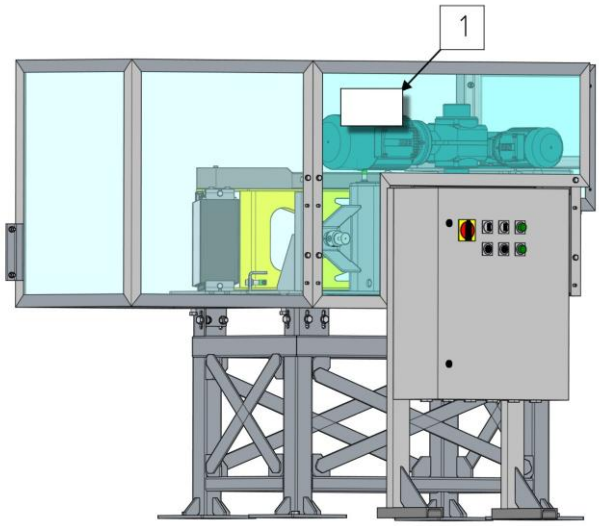


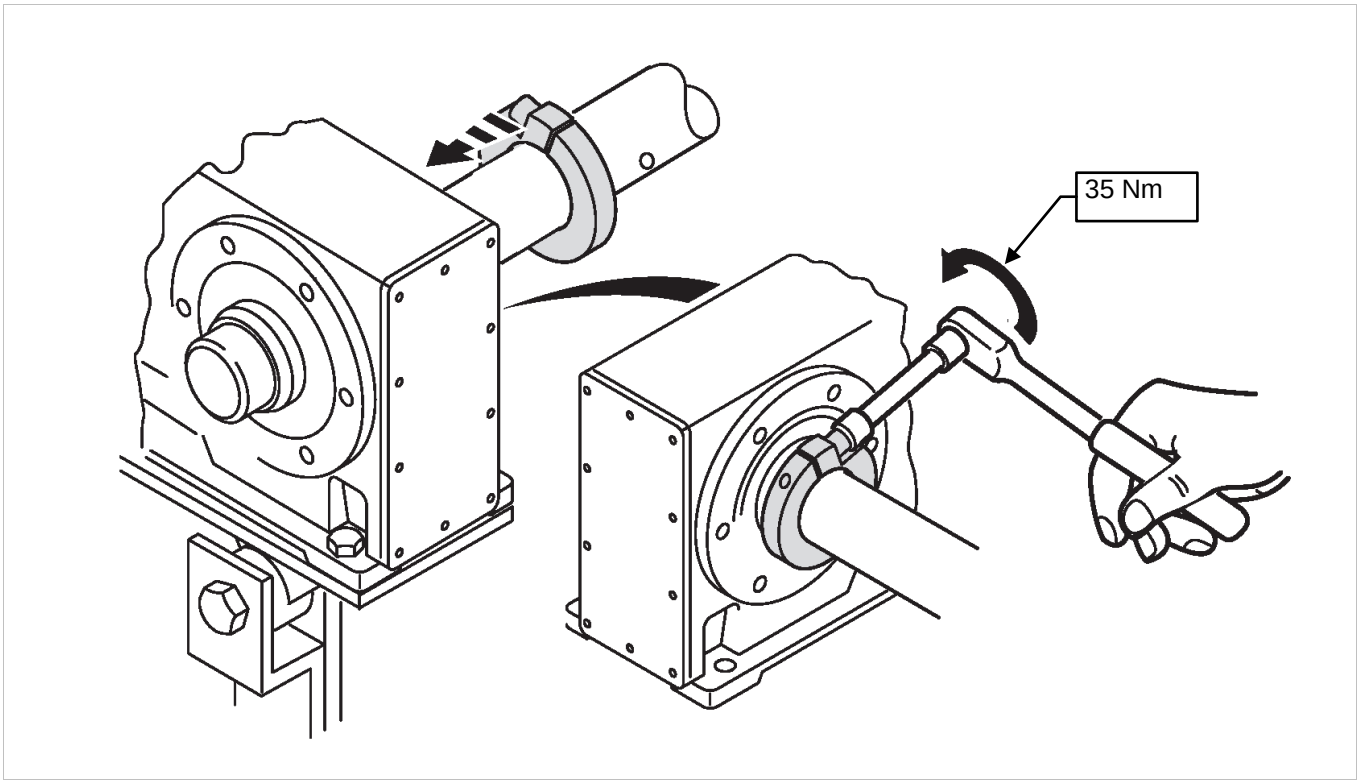
Figure 28 Safety sticker

- ⇨ N02004-0015 US item number 10"Wide x 4" High

Step 34 Add safety Stickers on designated plate (1) on safety fence

END OF PROCEDURE!

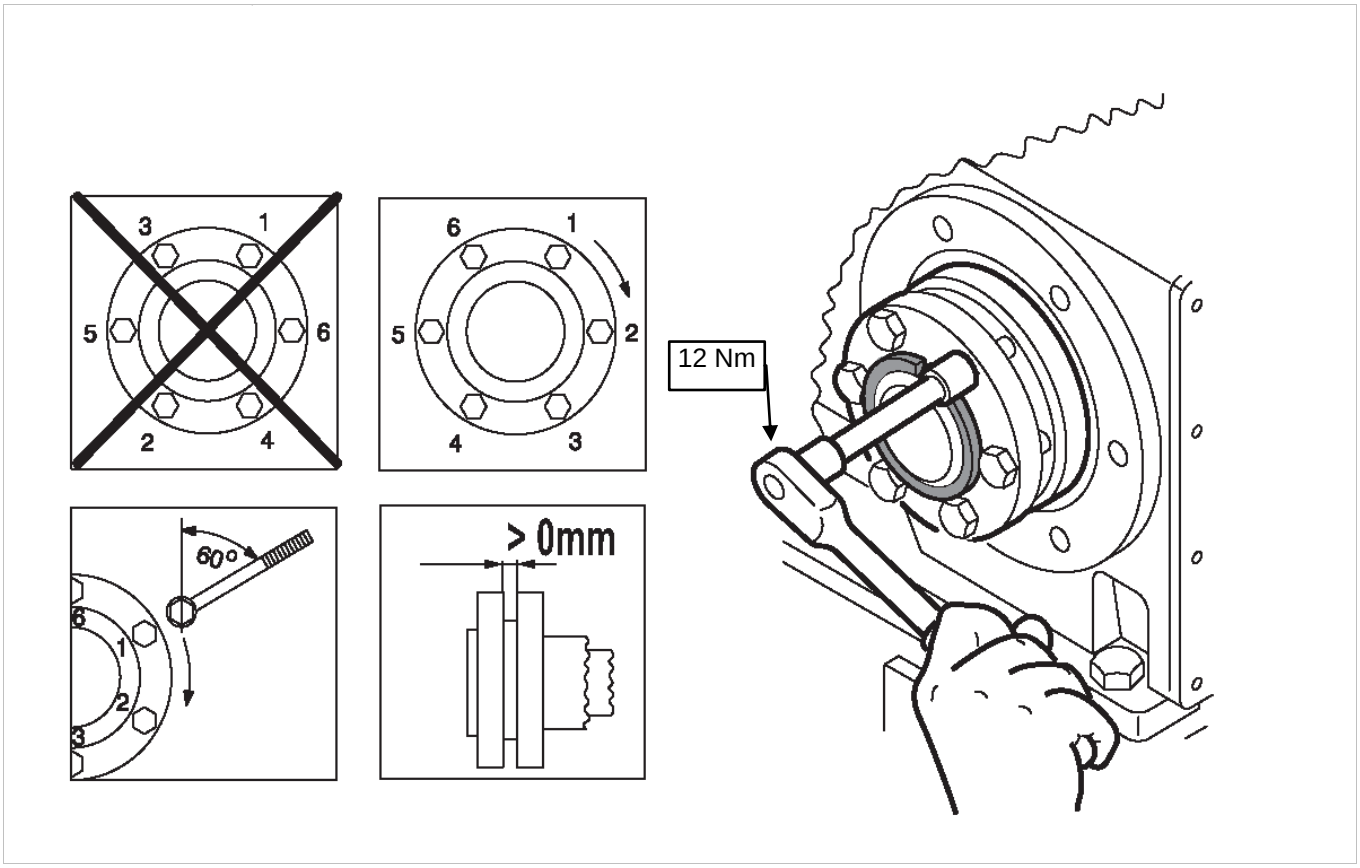
Torque values stop ring



Type		Nickel plated (standard)	Stainless steel
KT/FT	ST/WT	Torque [Nm]	
-	37	18	7.5
37	47	18	7.5
47	57	18	7.5
57, 67	67	**35**	18
77	77	35	18
87	87	35	18
97	97	35	18
107	-	38	38
127	-	65	65
157	-	150	150

Torque values locking screws

NOTE Tighten the locking screws with a torque wrench by working around several times from one screw to the next (not in diametrically opposite sequence)



Type		Nickel plated (standard)	Stainless steel
KT/FT	ST/WT	Torque [Nm]	
-	37	4.1	6.8
37	47	10	6.8
47	57	12	6.8
57, 67	67	**12**	15
77	77	30	30
87	87	30	50
97	97	30	50
107	-	59	65
127	-	100	120
157	-	100	120

Procedure SKF bearing mounting instructions

Precautions

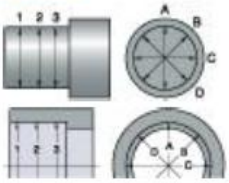
Mount the bearing in a clean environment. Housings, shafts and other components of the bearing arrar should be checked to see that they are clean.

The bearings should be left in their original packages until immediately before mounting so that they do not become dirty.

The dimensional and form accuracy of all components which will be in contact with the bearing should be checked.

The diameter of cylindrical shaft seats is usually checked using a micrometer at four positions in three planes. The measurement form available here or similar should be used in the measuring process and for future follow-up.

The diameter of cylindrical housing seats is usually checked using an internal gauge at four positions in three planes. The measurement form available here or similar should be used in the measuring process and for future follow-up.



Mounting procedure

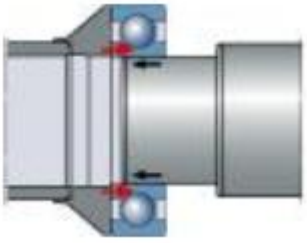
Wipe the preservative from the bore and outside diameter of the bearing.

Interference fit on the shaft

Lightly oil the bore of the bearing with a thin mineral oil.

Make sure the bearing is mounted at right angles to the shaft.

Apply the mounting force to the inner ring

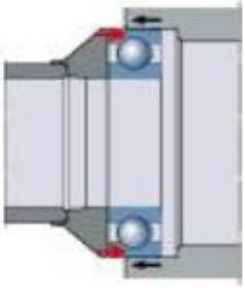


Interference fit in the housing

Lightly oil the outside diameter of the bearing with a thin mineral oil.

Make sure the bearing is mounted at right angles to the housing.

Apply the mounting force to the outer ring



Check that the shaft or outer ring can be rotated without any disturbances.

END OF PROCEDURE!