

# 8"-10" HD SHOCK ABSORBERS



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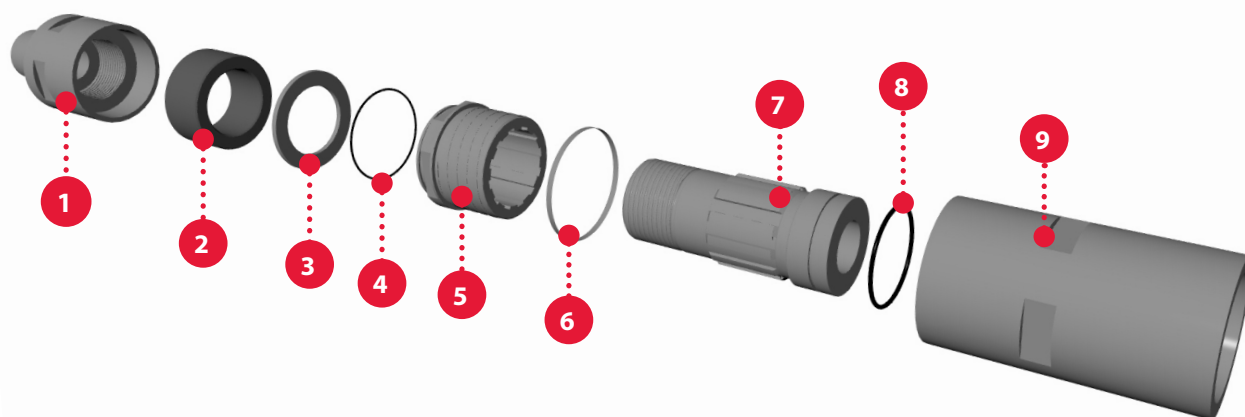
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ALWAYS THINK  
SAFETY FIRST!

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## 1. Parts List & Specifications



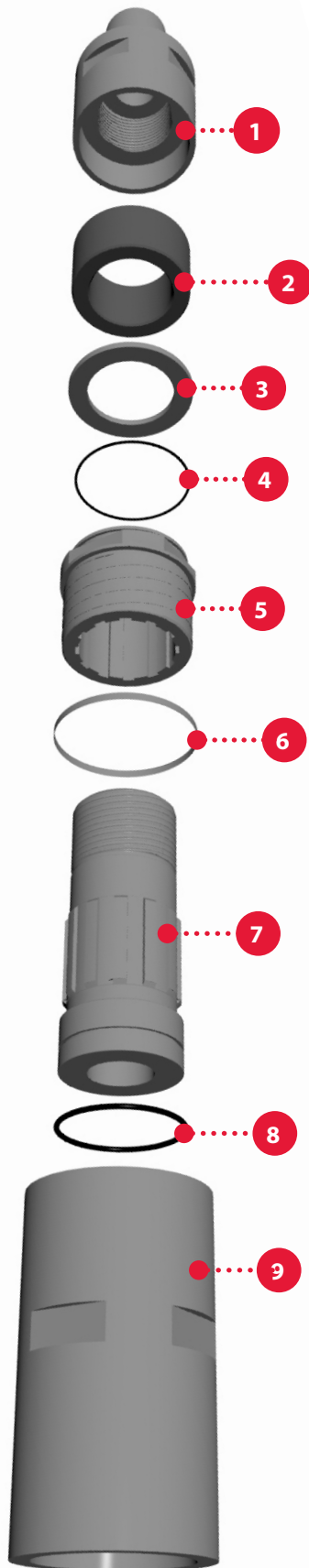
Ref	Description	Part number	
		HDSA8	HDSA10
1	Top connector	SA08ST0804M	SA10ST0880M
2	Buffer	SA08ST05	SA10ST05
3	Thrust Washer	SA08ST04	SA10ST04
4	Nut 'O' ring	SA08ST10	SA08ST10
5	Nut	SA08ST01	SA10ST01
6	Breakout Washer	SA08ST25	SA10ST25
7	Shaft	SA08ST02	SA10ST02
8	Shaft 'O' ring	SA08ST03	SA10ST03
9	Bottom Connector	SA08ST0904F	SA10ST0980F
	<b>Complete Shock Absorber</b>	<b>SA08ST04MF</b>	<b>SA10ST080MF</b>

### Important:

Refer to the above component parts table when following the servicing and maintenance guidelines, as internal configuration may vary slightly depending on the shock absorber model you are using.

Size	HDSA8 (4 1/2 reg. pin)	HDSA10 (6 5/8 reg. pin)
Effective length	591 mm / 23.268 in.	635 mm / 25.000 in.
Outside diameter	178 mm / 7.008 in.	216 mm / 8.504 in.
Net weight	84 kg / 185.2 lbs	98 kg / 216.1 lbs

## 2. Servicing & Maintenance

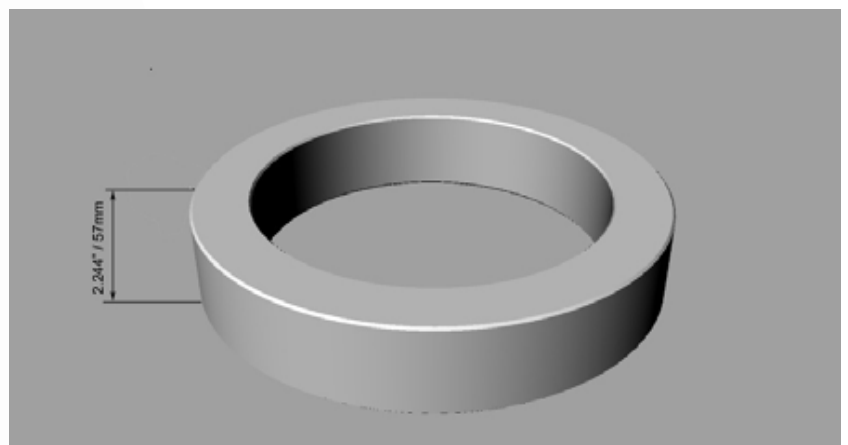


The Robit 8-10 inch "Down The Hole" Shock Absorbers should be serviced after every 500 hours of operation or every six months of intermittent use.

To disassemble the unit first cut away the Breakout washer (item 6) using either a saw or small hand grinder. Make sure that during the cutting process neither the Nut (item 5) or the Bottom Connector (item 9) are damaged.

Once the Breakout Washer is cut away, securely clamp item the Bottom Connector (item 9) to the bed of an appropriately sized stripping bench before attaching a Spanner to the flats on the Top Connector (item 1). Once the Spanner is in position you can then attach the benches Hydraulic Cylinder to the Spanner and apply the necessary load to unscrew the Top Connector (item 1) from the Shaft (item 7).

Once the Top Connector is fully removed, the Thrust Washer (item 3) and the Buffer (item 2) can be pulled from their housing. The Buffer should be checked for any signs of damage and its thickness measured. When the thickness has worn below 2" the Buffer should be replaced. Similarly if there are any signs of cracking or breaking up, the Buffer should be replaced.

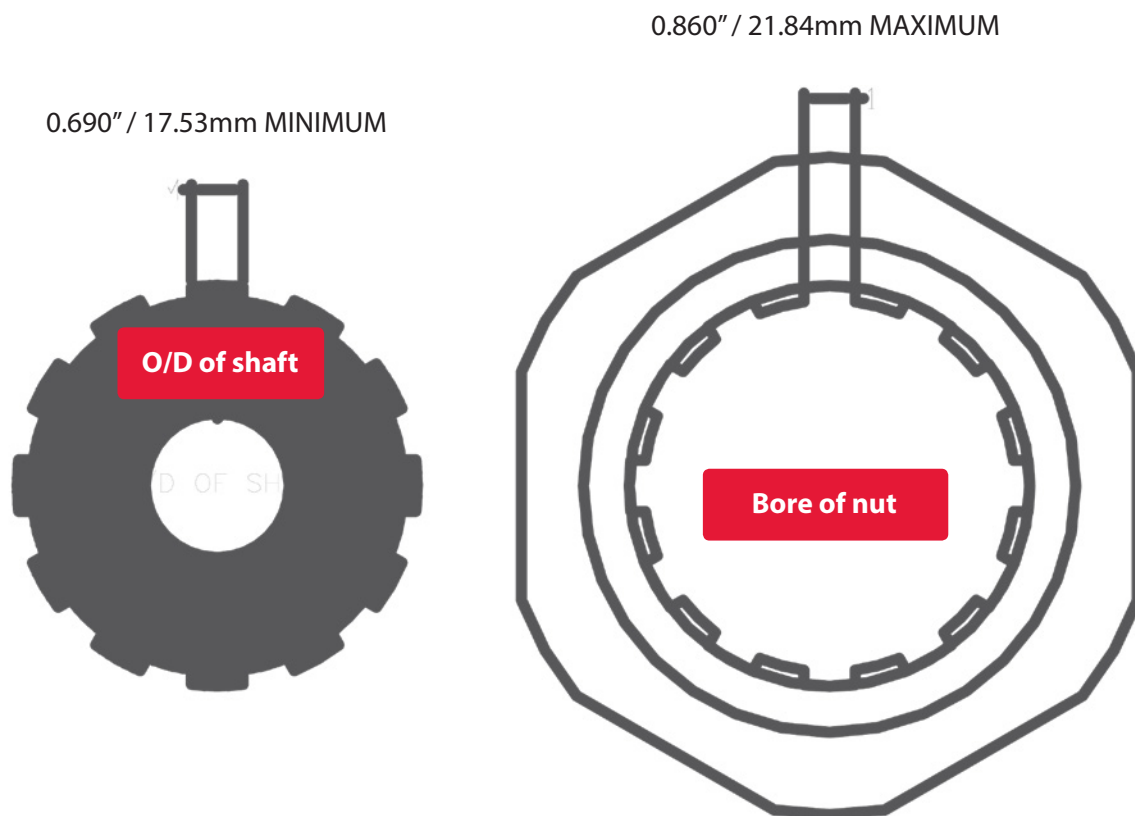


In a similar way to removing the Top Connector, a Spanner should now be attached to the spanner flats on the Nut (item 5), and the Hydraulic Cylinder on the stripping bench used to apply the necessary load to unscrew it from the Bottom Connector (item 9).

Once the Nut and Shaft are removed from the Bottom Connector, the splines on both items must be checked for wear. The diagram on the right shows the maximum permissible wear limits for both items. Should either, or both items show wear greater than these values then the component, or components should be replaced as excessive wear on these items will eventually result in failure of the unit and could cause loss of the Hammer and Button Bit down the hole.

It is recommended that every time the unit is stripped for inspection the Shaft "O" Ring (item 8) and the Nut "O" Ring (item 4) are removed and replaced with a new one.

Before re-assembling the unit all parts should be cleaned and checked for damage. Any "burrs" or sharp edges caused by the natural wearing of the components should be removed with a small hand grinder.



Prior to assembly all Splined and Threaded areas on the Nut, Shaft, Top Connector and Bottom Connector should be coated with a good quality, heat resistant grease, which will both reduce wear and aid stripping when the unit next requires servicing.

To assemble the unit first slide the Shaft (item 7) with the Shaft "O" Ring (item 8), into the Bottom Connector (item 9). Fit the Nut "O" Ring (item 4) and Breakout Washer (item 6) to the O/D of the Nut (item 5) then slide the assembly over the Shaft (item 7) making sure the splines are correctly engaged before screwing the Nut into the Bottom Connector.

Then slide the Thrust Washer (item 3) and the Buffer (item 2) over the Shaft (item 7), onto the top face of the Nut (item 5).

Finally screw the Top Connector (item 1) down on the Shaft (item 7) making sure the Buffer and Thrust Washer enter their housing as the Top Connector advances down the Shaft. The unit should be tightened to recommended maximum torque of 2.24 Ton.m / 2243 Kgm for the 8" Shock absorber and maximum torque of 3.45 Ton.m / 3454 Kgm for the 10" shock absorber. Fully torque up the unit and it is now again ready for use.

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